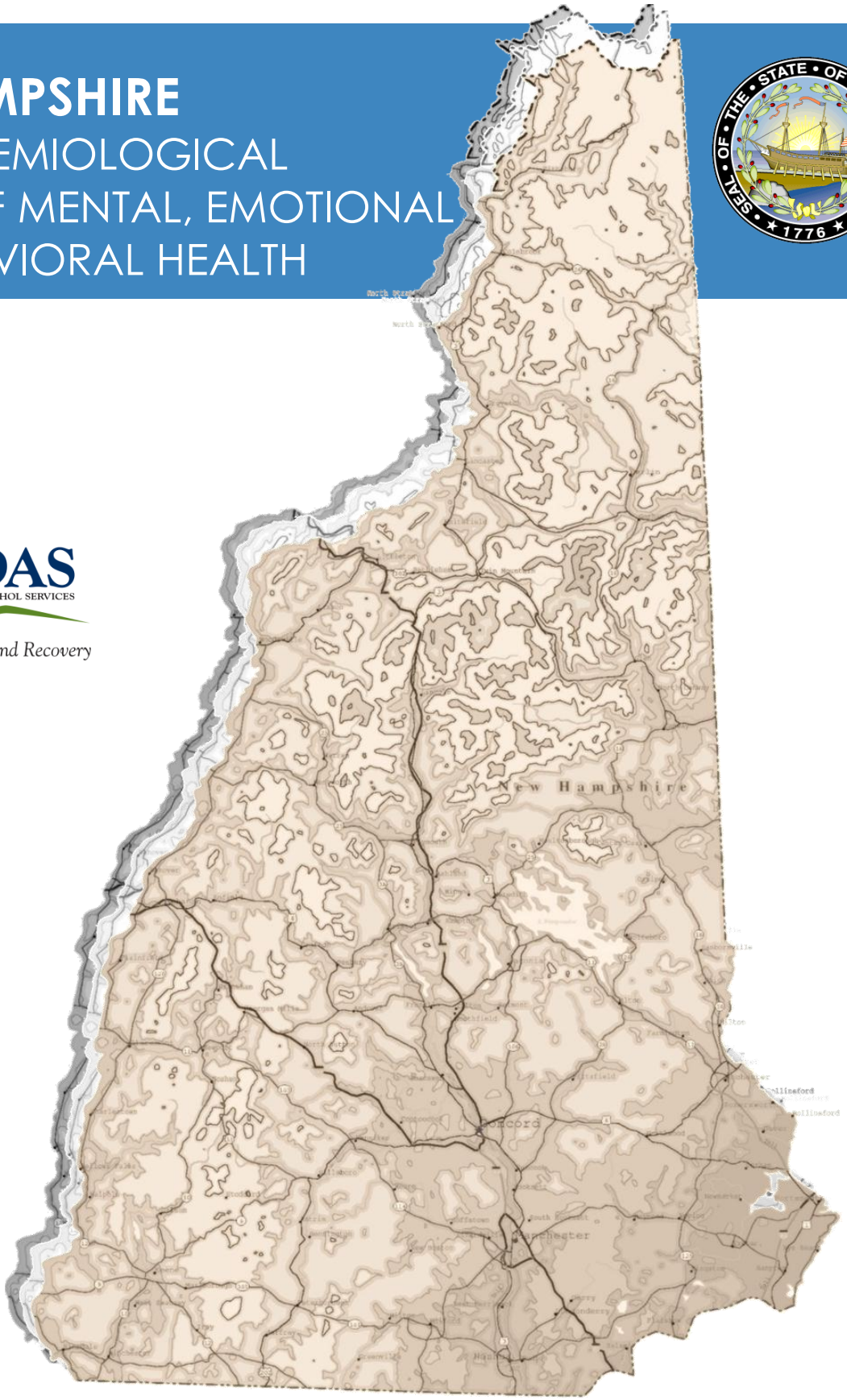
NEW HAMPSHIRE

STATE EPIDEMIOLOGICAL PROFILE OF MENTAL, EMOTIONAL AND BEHAVIORAL HEALTH

NHBDAS
BUREAU OF DRUG AND ALCOHOL SERVICES
Promoting Prevention and Recovery



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Executive Summary

Alcohol, tobacco and other drug use and abuse are among the most pervasive, disruptive and costly health issues in today's society. The impacts of abuse touch every facet of private and public life. From emergency rooms to court rooms to living rooms, alcohol, tobacco and other drug abuse erodes the well-being of individuals, families, communities, and society as a whole.

The goal of the New Hampshire State Epidemiological Profile is to describe substance use and abuse patterns and substance use risk factors and consequences for our state with a view to supporting identification of priorities and development of policy for prevention and treatment. To do so, the Profile draws upon a variety of data sources including State Sample Youth Risk Behavior Survey (YRBS), the Behavioral Risk Factor Surveillance System (BRFSS), the National Survey on Drug Use and Health (NSDUH), Hospital Discharge Data, and New Hampshire Death Statistics, National Incidence Based Reporting System (NIBRS), the Behavioral Health Indicator System, and the National Highway Traffic Safety Administration (NHTSA).

Findings

Alcohol

A statistically significantly higher proportion of New Hampshire residents in all age groups (64%) reported using alcohol in the past month compared with the nation overall (52%). Among 18 – 25 year olds in 2008-2009, New Hampshire had the highest rate of past month alcohol use of any state (75%).

New Hampshire young adults aged 18 – 25 were significantly more likely to report having had five or more drinks in one day ("binge drinking") in the past month (51%) than their peers nationally (41%).

The 2008-2009 NSDUH found that New Hampshire youth aged 12 – 17 were significantly more likely to report having had 5 or more drinks in 1 day ("binge drinking") in the past month (11%) than their peers nationally (9%).

By contrast, the 2009 Youth Risk Behavior Survey of 9th to 12th graders found no significant differences in past 30 day binge drinking rates comparing New Hampshire and United States high school students. While binge drinking among 12 – 17 year olds in the United States has declined significantly over the past several years, both the YRBS and the NSDUH show these declines have not been observed in New Hampshire.

In spite of New Hampshire's higher rates of past month alcohol use and binge drinking among youth and young adults, there is no significant difference in the proportion of New Hampshire residents and United States residents in any age group reporting alcohol abuse or dependence as defined by the NSDUH.

Corresponding to higher alcohol consumption patterns, New Hampshire residents in all age

groups surveyed by the NSDUH have a statistically significantly lower perception of great risk of having five or more alcoholic drinks once or twice per week than do other United States residents. In 2008-2009, youth aged 12- 17, about 1/3 (36%) perceive great risk in having five or more drinks, compared with 42% nationwide. Less than ¼ of 18 to 25 year olds (20%) responded that they perceive great risk of having five or more drinks once or twice per week, compared with 33% of individuals in this age group nationwide. 38% of New Hampshire adults aged 26+ and over reported perceiving great risk from having five or more drinks per day, compared with 38% of adults nationwide.

Marijuana

According to the National Survey on Drug Use and Health (NSDUH), New Hampshire ranked in the top fifth of states for past month marijuana use among persons 12 or older. In 2008 and 2009, the number of New Hampshire residents aged 12 and over reporting marijuana use in either the past year or past month was about 50% higher than United States estimates (Past year - NH 15%; US 11%; Past month – NH 10%; US 6%).

The NSDUH finds that , in 2008 and 2009, New Hampshire had statistically significantly higher proportions of youth aged 12 to 17 reporting marijuana use in the past month than the nation as a whole(NH 10%%; US 6%). By contrast, the the Youth Risk Behavior Survey (YRBS) does not show statistically significant differences in past 30 day marijuana use among students in grades 9 – 12. The YRBS does show that more than 25% of high school students reported marijuana use in the past 30 days in 2009. The NSDUH finds that one in four (28%) young adults aged 18 to 25 years reported marijuana use in the past month in 2008-2009. Almost half (42%) of young adults reported using marijuana in the past year in 2008-2009.

The National Survey on Drug Use and Health reports that New Hampshire residents of all ages are significantly less likely to perceive a great risk from smoking marijuana once per month when compared to the nation for each age group surveyed. Consistent with this low perception of great risk, a significantly higher proportion of young adults aged 18-25 report having initiated marijuana use (11%) compared to the nation overall since 2002 (7%).

Illicit Drugs

According to the 2008-2009 NSDUH, New Hampshire had a statistically significantly higher proportion of individuals aged 18 – 25 reporting use of illicit drugs other than marijuana in the past month (12%), compared with the nation as a whole (8%). Additionally, a statistically higher proportion of individuals 18 – 25 (17%) in New Hampshire reported having used prescription pain relievers non-medically compared with the nation as a whole (12%). One in ten of those aged 18 to 25 report dependence on or abuse of illicit drugs (including marijuana).

Crime

Arrest data from the 2008 National Incidence Based Reporting System (NIBRS) indicate that arrests for alcohol and drug related crimes are highest among males in each age group with the highest rates usually found in the 18 to 20 or 21 to 24 year age groups. For public drunkenness, the highest number of arrests per 1,000 population are for individuals ages 18 to 20 (12.1 per 1,000), with male (7.8 per 1,000) arrests almost double than female arrests (4.4 per 1,000). Males aged 21 to 24 have arrests rates for public drunkenness nearly as high at 7.5 per 1,000.

The two age groups with the highest number of arrests for Driving Under the Influence (DUI) in New Hampshire were those age 21 to 24 (12.8 arrests per 1,000 population) and

those aged 25 to 29 (10.5 arrests per 1,000 population). Arrests for drug and narcotic violations are most prevalent in the 18 to 20 year old category, with an arrest rate of 18.3 per 1,000 population. This is nearly double the next highest age group, 21 to 24 year olds, at 9.6 per 1,000. Males drug and narcotic arrests are nearly five times higher than female arrests in this same age group.

Other behaviors often associated with substance use that lead to arrest are disorderly conduct, vandalism/property damage, and simple assault. These indicators follow similar patterns in terms of highest arrest rates among 18 to 20 or 21 to 24 year old males and lower arrest rates among females in each age range.

Fatalities

From 2001 to 2006, between ⅓ and ½ (35% to over 45%) of motor vehicle crashes were related to alcohol consumption. New Hampshire's alcohol-related motor vehicle deaths per 100,000 was 3.7, while the nation was 5.6. The New Hampshire rate appears to be below the national average, however, without confidence intervals this cannot be confirmed.

Tobacco fatalities represented by Estimated Smoking-Attributable Mortality (SAM) are calculated to be about 272.4 deaths per 100,000 between 2000 and 2004. The fatality rate for males was higher at 373.1 deaths per 100,000.

According to the New Hampshire Medical Examiner's office, drug related deaths in New Hampshire has increased ten of the last fifteen years, with the number of drug related deaths (includes prescription related deaths) more than tripling since 2000 (2000 – 48 deaths; 2010 – 174 deaths). Data on the age of individuals who have died as a result of drug use or abuse show a very different pattern in that adults between the ages of 41 and 50 had a higher incidence of drug-related death than other age groups between 2005 and 2010. More males than females died of drug-related deaths in New Hampshire between 2005 and 2010. There are no trends over time by gender. The number of deaths involving intentional or accidental overdoses of prescribed drugs has almost doubled between 2008 and 2009.

By addressing the increases reported in prescription drug abuse, the New Hampshire Attorney General's office has brought new attention to the accessibility of these drugs. Data from the New Hampshire Medical Examiner's Office shows the source of drugs involved in overdose deaths. According to this data, the number of deaths involving overdoses of prescribed drugs has almost doubled between 2008 and 2009.

Mental Health and Substance Use/Abuse

Findings of a 2009 study of Medicaid claims data, indicates that 10.8% of all Medicaid members have a mental health condition with secondary substance abuse disorders or co-occuring disorders. Of these, the depression categories such as Major Depression, Bipolar & Other Affective Psychoses and Depression NEC, when combined, comprise the greatest percentage (41%) of Medicaid recipients with secondary substance abuse disorders.

Inpatient Hospital discharges for all New Hampshire patients, regardless of payor, for Substance Abuse Related Mental Health conditions are statistically significantly highest for adults aged 45 to 54 years (716.7 per 100,000) and also those aged 75 to 84 years (707.3 per 100,000).

Introduction

Alcohol, tobacco and other drug use and abuse are among the most pervasive, disruptive and costly health issues in today's society. The impacts of abuse touch every facet of private and public life. From emergency rooms to court rooms to living rooms, alcohol, tobacco and other drug abuse erodes the well-being of individuals, families, communities, and society as a whole.

Efforts to adequately and effectively address such a pervasive and often stigmatized health concern are challenged not simply by limited budgets but also by the issue's complexity.

Substance use is difficult to prevent and treat because it is rooted in individual choice. But the individual's choice to use and abuse is impacted by a constellation of factors such as media, family communication, unrecognized or untreated mental and emotional health conditions, community norms, genetic influences, self-esteem, trauma history, and many other factors.

The first step in addressing substance use and abuse in New Hampshire is to construct an epidemiological profile that outlines the scope and severity of substance use and abuse and their consequences. This New Hampshire State Epidemiological Profile draws upon a variety of data sources to describe substance use and abuse patterns and substance use risk factors and consequences for our state. The Profile provides a baseline for state agencies, community networks and coalitions, practitioners within the field of substance use and mental health services, as well as individuals and institutions who are impacted by and play a role of potential influence in the prevention and treatment of mental, emotional and behavioral health. These sectors of impact and influence include primary care, public safety, business, government, and education. It is expected that future iterations of this profile will incorporate new data sources and provide new insights to guide New Hampshire's prevention and treatment efforts.

The profile begins by providing basic information about the demographic and cultural context of the state "community."

Demographics and Culture

New Hampshire is located in northern New England and bordered by Vermont to the west, Maine to the east, Massachusetts to the south and Canada to the north. New Hampshire is known as the "Granite State" for the geology of its White Mountain region and for the self-sufficiency of its approximately 1.3 million residents. New Hampshire's population has become more diverse over the last several decades, with people from many different races, ethnicities and countries of origin moving to the state, particularly the southern tier, for educational and work opportunities.

Major industries in New Hampshire include tourism, hospitality, lumber/logging, electrical and plastic manufacturing, agriculture, machinery and technology. Generally, much of New Hampshire's business and industry involves locally owned small businesses and cottage industries.

According to the 2010 Census, New Hampshire's most populated cities/towns are Manchester (109,565), Nashua (86,494), Concord (42,695), Derry (33,109) and Dover (29,987). New Hampshire has ten counties and strong local governance at the municipal level.

NH's 2010 Census indicated that 37.8% of the population lives in rural areas while 62.2% lives in urban areas. New Hampshire's population is 95.3% white, 1.4% black, 0.3% American Indian/Alaska Native, 2% Asian, 1.1% multi-racial, and 2.8% Hispanic or Latino. Less than 0.1% is Native Hawaiian or Other Pacific Islander.

Below is a table showing demographic changes from the 2000 Census.

Figure 1

Population Comparison by Race (2000 & 2010)

Race alone or in combination with one or more other races	2000 Population	Percent	2010 Population	Percent
White	1,186,851	96.0	1,261,735	95.3
Black or African American	9,035	0.7	18,114	1.4
American Indian & Alaska Native	2,964	0.2	3,848	0.3
Asian	15,931	1.3	25,931	2.0
Native Hawaiian & Other Pacific Islander	371	0.0	538	0.0
Other race or more than one race	20,634	1.7	14,409	1.1
TOTAL	**1,235,786**		**1,324,575**	
Hispanic Origin				
Hispanic or Latino (of any race)	20,489	1.7	36,867	2.8
Not Hispanic or Latino Total	1,1215,297	98.3	1,287,708	97.2

Source: U.S. Census Bureau

New Hampshire's median household income was $60,734 in 2009, varying across counties and population areas from a low of $40,835 in the state's most northern and rural county, Coos, to a high of $70,196 in Rockingham County, on the state's seacoast. Unemployment rates also vary across the state. New Hampshire's unemployment rate for 2009 was 6.3%, ranging from a high of 8.1% in Coos County to a low of 5.2% in Grafton County. Fewer than eight percent (7.8%) of all New Hampshire residents live below the poverty level, compared to the national rate of 13.2%.

Substance Use Services History and Context

The state government of New Hampshire plays a critical role in the study of and intervention in substance use and mental health disorders. All state agencies in New Hampshire deal with mental, emotional and behavioral health. For example, state police address the public safety hazards of drinking and driving on a daily basis; correctional facilities house individuals with acute and chronic addictions as do housing and homeless agencies; schools address truancy, drug dealing, low academic achievement, and other fallout of substance abusing teens; and behavioral health agencies work with clients with co-occurring mental health and substance use disorders as well as those emotionally and physically abused or neglected by family members with mental

health and/or substance use disorders. These are just a few examples of the far-reaching effects and costs of substance use disorders.

Because mental, emotional and behavioral health issues have such a profound impact across so many community domains, the State of New Hampshire maintains a Bureau of Drug and Alcohol Services (BDAS) within its Department of Health and Human Services (DHHS) to fund evidence-based programs and strategies across the spectrum of prevention, intervention, treatment and recovery. The BDAS's funding strategy relies largely on private non-profit organizations to deliver evidence-based programming across the continuum of care, including local coalitions, social service agencies, mental health agencies, treatment facilities, and community-based organizations. These service providers deliver evidence-based practices to target populations including youth, elders, individuals re-entering from correctional facilities, multiple Driving While under the Influence (DWI) offenders, veterans, trauma victims, and low income individuals. Other state agencies also contribute significantly to the prevention and treatment of substance use disorders, including responsible server trainings through the New Hampshire Bureau of Liquor Enforcement, educational and intervention programs promoted by the New Hampshire Department of Education, re-entry programs to support recovery for individuals leaving state correctional facilities, intervention programs for service men and women and their families supported by the New Hampshire National Guard, and enforcement strategies such as the Enforcing Underage Drinking Law initiative promoted and supported by the Attorney General's office.

Many of these initiatives in New Hampshire are supported by federal grant programs, state allocations, and private foundations such as the New Hampshire Charitable Foundation that maintains a specific and significant fund to support the prevention and treatment of substance use disorders. The Foundation is a co-funder of BDAS's technical assistance center to support program and strategy implementation, evaluation and quality improvement. In addition, the state maintains a training institute and two credentialing boards to ensure workforce development and licensure. The BDAS also maintains a clearinghouse and lending library of media, curricula and other materials in relating to alcohol and other drug services; contract management functions; information technology specialists; accounting; two web-based data systems for funded providers; a resource and development team; and a 24-hour help line.[1]

An important contextual factor in the state's substance use services is the establishment of the Governor's Commission on Alcohol and Other Drug Prevention, Intervention, and Treatment[2] by the New Hampshire State Legislature in 2000. The mission of the Governor's Commission is to significantly reduce alcohol and drug problems and their behavioral, health and social consequences for the citizens of New Hampshire by advising the Governor regarding policy, funding and the delivery of effective, efficient, coordinated alcohol and drug abuse prevention and treatment services. Representatives from a wide range of state agencies and perspectives (please see Appendix B: Governor's Commission Membership) serve on the Commission that meets bi-monthly in service to the state's overarching strategy to prevent and reduce substance abuse and its negative consequences.

[1] See Appendix A to review the complete NH BDAS Logic Model.
[2] Referred to as the Governor's Commission in the remainder of the report.

One of the tasks of the Governor's Commission is developing and revising as necessary a statewide plan for the effective prevention of alcohol and drug abuse, particularly among youth, and ensuring a comprehensive system of intervention and treatment for individuals and families affected by alcohol and drug abuse. The most recent plan titled, *Overcoming the Impact of Alcohol and Other Drug Problems: A Plan for New Hampshire*[3] was published in 2007 and is currently under revision to reflect the New Hampshire's transformation to a resiliency- and recovery-oriented system of care. The Commission maintains several task forces that provide oversight to state-wide initiatives, including a prevention task force, a treatment task force, a public education and awareness task force, and State Epidemiological Outcome Workgroup that serves as the Commission's statutorily required data and evaluation task force. Task forces meet monthly, include representatives from communities and providers, and provide updates to the full Commission every other month.

Additionally, the BDAS has developed a regional network system for alcohol and other drug abuse prevention that ensures data-driven, community-based decision making; resource development; prioritization; and environmental prevention planning.

This regional network system covers every town in the state through 10 regional contracts to fiscal sponsors who employ a full-time coordinator for their respective regions. Additionally, the state's strategy included the funding of approximately 27 prevention providers who were delivering evidence-based direct prevention and early intervention services to selective and indicated populations through June 30, 2011. Contracts with 26 of these 27 providers ended June 30, 2011, due to state budget reductions and prioritizations. The state has continued contracts with 18 of 20 treatment providers who are using evidence-based assessment and treatment planning in the provision of outpatient, intensive outpatient and inpatient treatment but with significant contract reductions due to state budget limitations.

Advocates of prevention, intervention, treatment and recovery services in New Hampshire have requested that data be collected in the coming years to assess the impact of these service reductions, particularly in the area of prevention.

SEOW History and Context

New Hampshire's first State Epidemiological Outcomes Workgroup (SEOW) convened between 2006 and 2008 to analyze data and determine priorities for the state's Strategic Prevention Framework (SPF). Membership at that time included the New Hampshire Medical Examiner, the New Hampshire Division of Public Health Services, the New Hampshire Department of Safety, the University of New Hampshire, primary care facilities, the New Hampshire Office of Alcohol and Drug Policy and other stakeholders and contributors. Between 2006 and 2008, the SEOW met bimonthly to determine relevant data sources, select indicators, and develop a state strategy for a redesigned prevention delivery system to be implemented with community level decision making, data interpretation, and resource sharing.

In January 2011, the New Hampshire SEOW was reformed to meet the next level of data needs: expanding data analysis to include the range of mental, emotional, and behavioral (MEB) health indicators to support data, planning, and service integration at the state and regional level.

[3] See Appendix C to read *Overcoming the Impact of Alcohol and Other Drug Problems: A Plan for NH*.

The SEOW remains a multifaceted and multidimensional research, assessment, and evaluation workgroup, and is now composed of two subgroups; one risk-focused and the other resiliency-focused.

SEOW leadership determined a reconfiguration of functional levels moving forward, adding a community level for the purpose of community asset development as both an input and output. Therefore, the New Hampshire SEOW operates on three levels:

SEOW Leadership

Members include the epidemiologists from the New Hampshire Bureau of Drug and Alcohol Services and the Division of Public Health Services; the New Hampshire Administrator for Prevention Services, the New Hampshire Administrator for Behavioral Health services; the Director of the New Hampshire Center for Excellence, a technical assistance center for alcohol and drug services; and representatives from the Governor's Commission on Alcohol and Other Drug Abuse Prevention, Intervention and Treatment.

SEOW-MEB (State Epidemiological Outcomes Workgroup for Mental, Emotional, and Behavioral Health)

Members include data analysts from the New Hampshire Department of Safety, New Hampshire Department of Motor Vehicles, the New Hampshire Bureau of Behavioral Health, New Hampshire Department of Education, and the University of New Hampshire.

SEOW-CAD (State Epidemiological Outcomes Workgroup for Community Asset Development)

Members include ten Regional Network Coordinators and Leadership Team chairs of the New Hampshire Regional Network System for alcohol and other drug prevention and mental and emotional health promotion.

This three-tiered structure is designed to redress preexisting analytical and data flow models that did not lend themselves to analysis but rather to data delivery. It was determined that a downstream analytical group was needed to review, in totality, all of the data summarized by the other two groups. Whereas the SEOW-MEB and SEOW-CAD workgroups which provide the sorely-needed summarized and analyzed data for specific indicators, are by design, not populated by high-level policy analysts or administrators with the capacity to summarize the data across domains, or to discuss and report the implications of that data.

To this end, SEOW Leadership determined that a higher analytical level was needed to serve with Leadership and ultimately responsible for SEOW activities of the SEOW-MEB and SEOW-CAD. Members of the current SEOW Leadership will now be augmented by analysts extracted from the extant SEOW-MEB and SEOW-CAD workgroups, and with administrative personnel from Bureau of Behavioral Health, the Division of Public Health Services, and the Bureau of Drug and Alcohol Services.

Consistent from previous iterations of the SEOW are the mission, vision, and primary objectives.

SEOW Mission Statement

The NH SEOW promotes analytical thinking and methods in support of improved mental, emotional and behavioral health in NH.

OBJECTIVE 1 To collect, analyze and interpret data to determine the scope and extent of substance use and behavioral health risk and related problems, both statewide and locally.

OBJECTIVE 2 To collect, analyze, and interpret data to characterize protective factors for mental, emotional, and behavioral health, and assets vital to the delivery of prevention, treatment, and recovery services.

OBJECTIVE 3 To facilitate the establishment of a web-accessible database of substance use and mental health indicators to enable analysis of prevalence, trends and impacts at the state and regional levels.

OBJECTIVE 4 To develop and disseminate data products to targeted audiences in the education, health, government, business and safety sectors to address questions of direct policy relevance and increase awareness and shared responsibility.

OBJECTIVE 5 To provide input into New Hampshire's priorities for its Substance Abuse Prevention and Treatment (SAPT) Block Grant Application.

Data Sources

The following tables show the data sources included in this profile and where data was accessed.

Data Sources References	Access
US Decennial Census	http://factfinder2.census.gov
State Sample Youth Risk Behavior Survey (YRBS-SS)	http://www.education.nh.gov
Behavioral Risk Factor Surveillance System (BRFSS)	Behavioral Health Indicator System (BHIS)
National Survey on Drug Use and Health (NSDUH)	Behavioral Health Indicator System (BHIS)
Fatal Accident Reporting System (FARS)	Behavioral Health Indicator System (BHIS)
National Incident-Based Reporting System (NIBRS)	NH Department of Safety
National Vital Statistics System (NVSS)	Behavioral Health Indicator System (BHIS)
NH School Safety Reports	NH Department of Education
NH Special Education Data	NH Department of Education
NH Community Mental Health Data	NH Bureau of Behavioral Health
NH Client Event Data System (CEDS)	NH Bureau of Drug and Alcohol Services
NH Death Statistics	NH Medical Examiner's Office

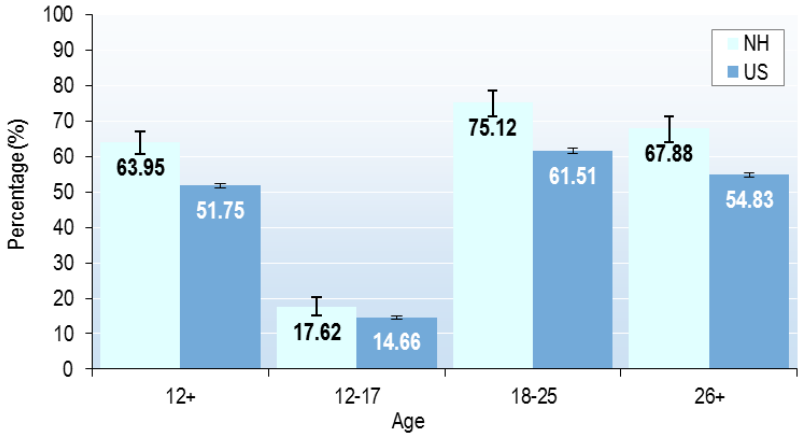
Use, Dependence and Perceived Risk of Use of Alcohol, Tobacco and Other Drugs

This section presents data on consumption, dependence and perceived risk of substance use for New Hampshire residents overall as well as for youth, young adult, and adults. Data are presented for the top four substances of abuse in New Hampshire: alcohol, marijuana, tobacco, and illicit drugs (including prescription drugs used non-medically).

Alcohol Use, Dependence and Perceived Risk of Use in New Hampshire

FIGURE 2

Alcohol Use in Past Month (2008-2009)



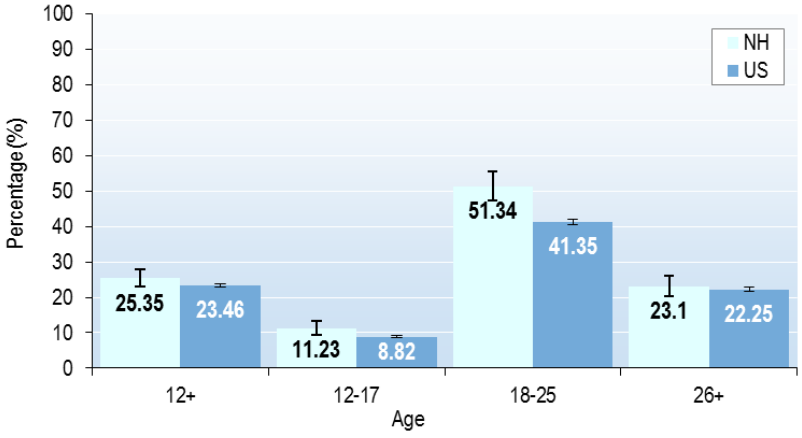
Source: National Survey on Drug Use and Health (2008-2009)

According to the 2008-2009 National Survey on Drug Use and Health (NSDUH), a statistically greater proportion of NH residents in all age categories reported using alcohol in the past month compared with United States residents.

Source: National Survey on Drug Use and Health (2008-2009)

FIGURE 3

Binge Alcohol Use in Past Month (2008-2009)



Source: National Survey on Drug Use and Health (2008-2009)

The NSDUH defines binge alcohol use as drinking five or more drinks on the same occasion on at least one day in the past 30 days.

The figure to the left shows self-reported binge drinking by age for New Hampshire as compared to the United States. Overall, New Hampshire has similar rates as the United States for those aged 12 and over and also for those aged 26 and over.

However, in the age categories of 12-17 years and 18-25 years, New Hampshire rates are statistically higher than United States' rates. More than half of young adults aged 18-25 report binge alcohol use in the past month. Over 11% of those aged 12-17 report binge alcohol use in the past month.

The NSDUH includes a series of questions to assess the prevalence of dependence on or abuse of alcohol in the past 12 months. There is no statistically significant difference in the proportion of individuals in each age category reporting characteristics consistent with alcohol abuse or dependence in the past year in New Hampshire compared with the nation overall.

Dependence and abuse questions are based on the criteria in the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV)* (American Psychiatric Association [APA], 1994)

Specifically, for marijuana, hallucinogens, inhalants, and tranquilizers, a respondent was defined as having dependence if he/she met three or more of the following six dependence criteria:

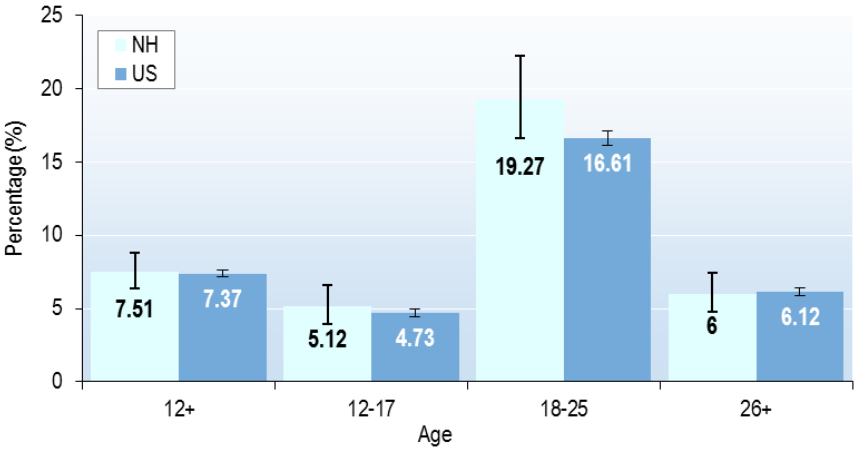
1) Spent a great deal of time over a period of a month getting, using, or getting over the effects of the substance.
2) Used the substance more often than intended or was unable to keep set limits on the substance use.
3) Needed to use the substance more than before to get desired effects or noticed that the same amount of substance use had less effect than before.
4) Inability to cut down or stop using the substance every time tried or wanted to.
5) Continued to use the substance even though it was causing problems with emotions, nerves, mental health, or physical problems.
6) The substance use reduced or eliminated involvement or participation in important activities.
7) For alcohol, cocaine, heroin, pain relievers, sedatives, and stimulants, a seventh withdrawal criterion was added. A respondent was defined as having dependence if he/she met three or more of seven dependence criteria. The seventh withdrawal criterion is defined by a respondent reporting having experienced a certain number of withdrawal symptoms that vary by substance (e.g., having trouble sleeping, cramps, hands tremble).

For each illicit drug and alcohol, a respondent was defined as having abused that substance if he or she met one or more of the following four abuse criteria and was determined not to be dependent on the respective substance in the past year:

1) Serious problems at home, work, or school caused by the substance, such as neglecting your children, missing work or school, doing a poor job at work or school, or losing a job or dropping out of school.
2) Used the substance regularly and then did something that might have put you in physical danger.
3) Use of the substance caused you to do things that repeatedly got you in trouble with the law.
4) Had problems with family or friends that were probably caused by using the substance and continued to use the substance even though you thought the substance use caused these problems.

FIGURE 4

Alcohol Dependence or Abuse in Past Year (2008-2009)



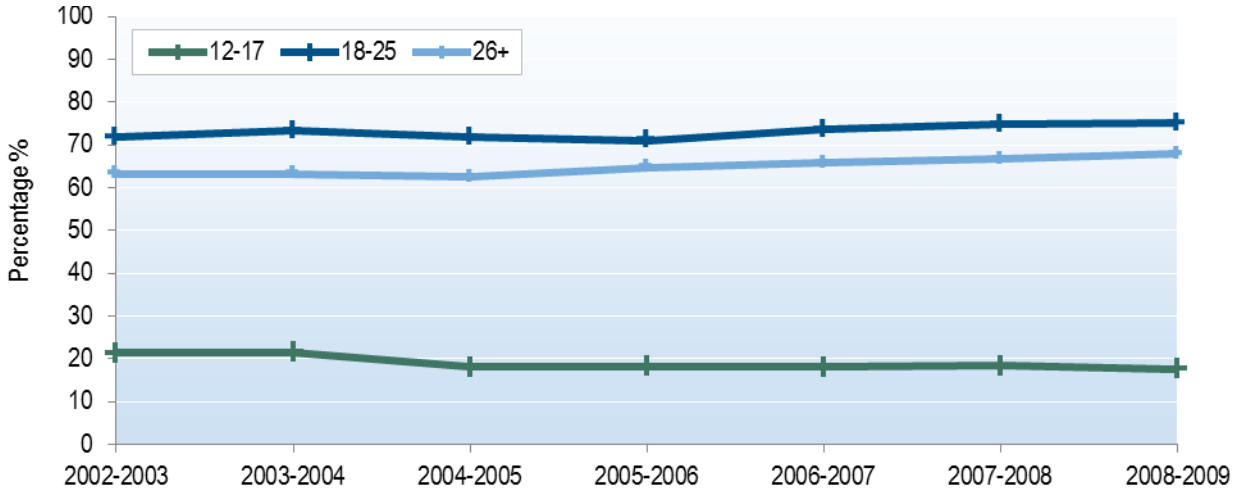
It is of note that nearly 20% of those aged 18-25 report that they are alcohol dependent or abuse alcohol. Over 5% of 12 to 17 year olds report alcohol dependency or abuse.

Source: National Survey on Drug Use and Health (2008-2009)

In New Hampshire, there have been no recent significant shifts in self-reported past month alcohol use by age over time.While past month alcohol use among youth aged 12-17 appear to have declined nationally between 2002-2003 and 2008-2009, past month alcohol use in New Hampshire youth levelled off between 2004-2005 and 2008-2009 (despite a statistically significant decline between 2003-2004 and 2004-2005). The proportion of New Hampshire young adults aged18-25 and adults aged 26 years and over who report past month alcohol use has remained consistent since the 2002-2003 period.

FIGURE 5

New Hampshire Alcohol Use in Past Month – Trends by Age and Year

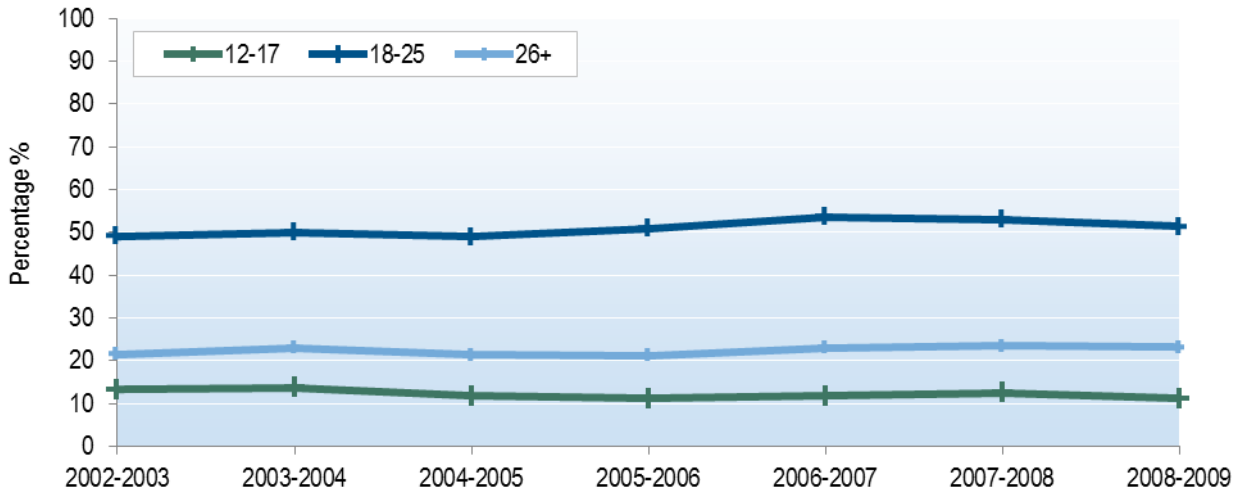


Source: National Survey on Drug Use and Health

While there there have been no significant shifts in the proportion of New Hampshire individuals reporting past month binge drinnking in any age group, binge drinking among 12-17 year olds in the United States has declined significantly since 2002-2003 (from 10.65% in 2002-2003 to 8.82% in 2008-2009).

FIGURE 6

New Hampshire Binge Alcohol Use in Past Month – Trends by Age and Year

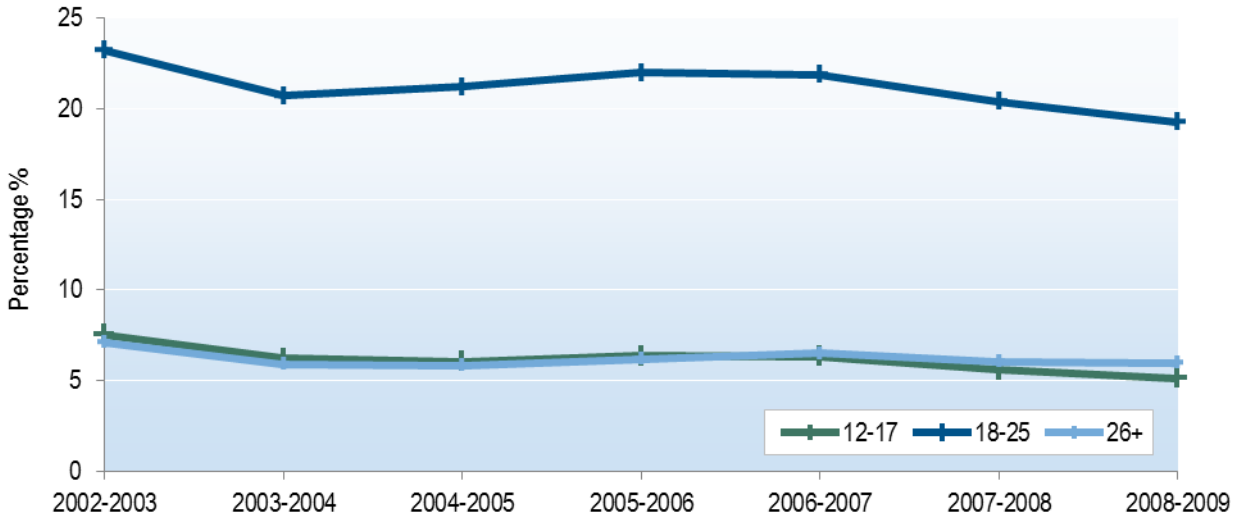


Source: National Survey on Drug Use and Health

There has been no statistically significant variation in the proportion of individuals in New Hampshire reporting characteristics consistent with alcohol dependence or abuse in the past year for any age grouping between 2002-2003 and 2008- 2009. The proportion of individuals in New Hampshire with alcohol dependence or abuse appears consistent with national trends for youth aged 12-17 and adults aged 26 and older. The proportion of New Hampshire young adults aged 18-25 years with alcohol dependence or abuse in 2002- 2003 (23.21%) was likely higher than the United States estimate (17.43%); no confidence intervals for the US estimate are available.

FIGURE 7

New Hampshire Alcohol Dependence or Abuse in Past Year – Trends by Age and Year

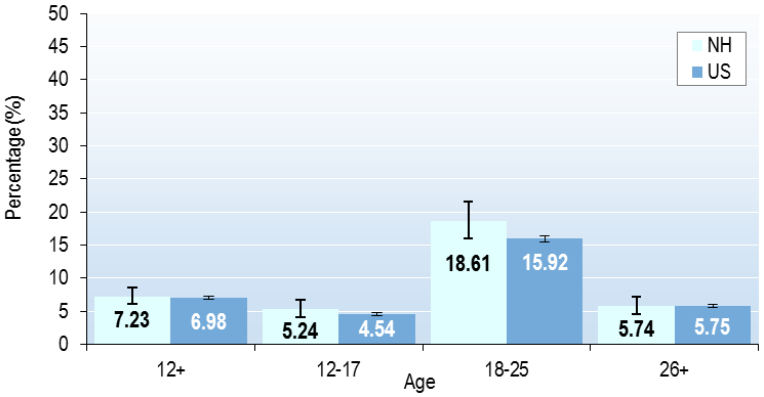


Source: National Survey on Drug Use and Health

The NSDUH also collects data on unmet substance use treatment needs. The 2008-2009 NSDUH found that a statistically equivalent proportions of New Hampshire residents in each age group surveyed reported feeling they needed treatment for alcohol use but not receiving it.
The NSDUH also finds no significant changes in trends in New Hampshire or the United States on this measure.

FIGURE 8

Needing But Not Receiving Treatment for Alcohol Use in Past Year (2008-2009)



Source: National Survey on Drug Use and Health

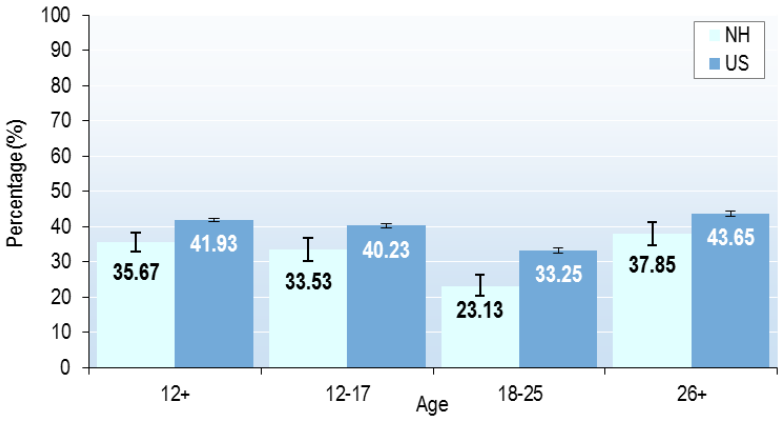
The NSDUH definition of a person needing but not receiving treatment for an alcohol problem is that the person meets the criteria for abuse of or dependence on illicit drugs in the past year according to the DSM-IV, but did not receive specialty treatment for an illicit drug problem in the past year.

Specialty treatment is treatment received at a drug or alcohol rehabilitation facility (inpatient or outpatient), hospital (inpatient only), or mental health center. It does not include treatment at an emergency room, private doctor's office, self-help group, prison or jail, or hospital as an outpatient.

Source: *Substance Dependence, Abuse, and Treatment Need.* Office of Applied Studies. SAMHSA. Available at: http://oas.samhsa.gov/2k8state/Ch5.htm Downloaded 11/15/11

Overall, New Hampshire residents aged twelve and over have a lower perception of great risk of having five or more alcoholic drinks once or twice per week than do other United States residents. For each age group surveyed, the results are statistically significantly below the United States responses.

FIGURE 9



Source: National Survey on Drug Use and Health

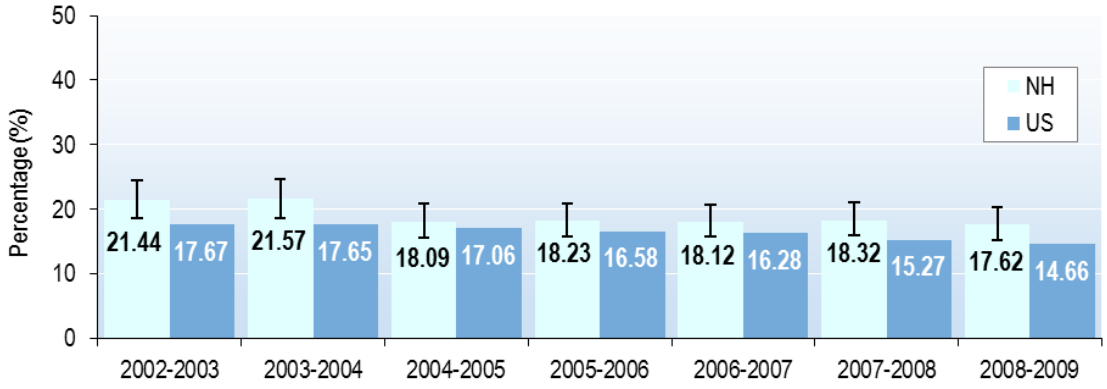
The proportion of New Hampshire residents who perceive great risk of having five or more drinks is on par with New England states for each age group, except for 18-25 year age group. The proportion of New Hampshire young adults aged 18-25 perceiving great risk of having five or more drinks is statistically lower than the proportion in the United States, Connecticut, and Rhode Island.

Alcohol Use, Dependence & Perceived Risk of Use Among New Hampshire Youth

According to the NSDUH, New Hampshire had significantly higher rates of alcohol use in the past month among youth aged 12-17 years than the United States. There were no statistically signifiant differences in the proportion of New Hampshire youth reporting alcohol use in the past 30 days between New Hampshire and the other New England states.

FIGURE 10

Alcohol Use in Past Month Ages 12-17



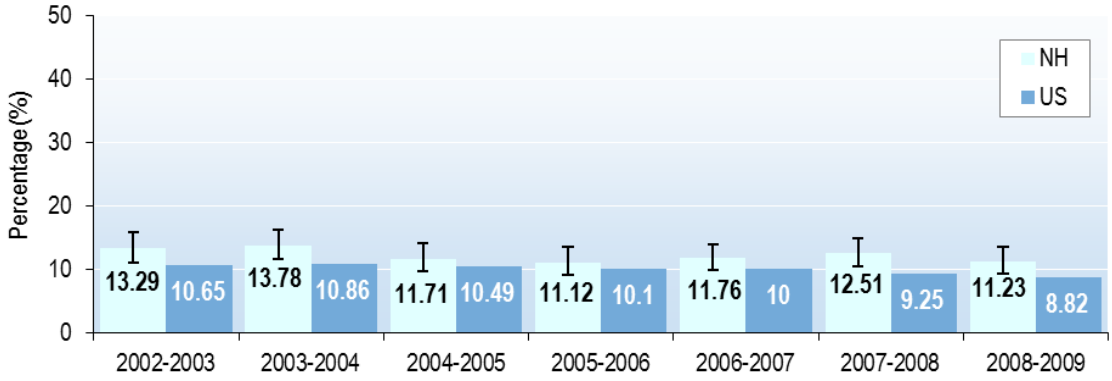
Source: National Survey on Drug Use and Health

Since 2002, nearly one in five New Hampshire children aged 12-17 reported drinking five or more drinks on the same occasion on at least one day in the past 30 days ("binge drinking"). In 2008-2009 a significantly higher proportion of New Hampshire youth report binge drinking than youth nationwide; this is likely also the case for 2007-2008 although confidence intervals for the U.S. estimate are not available. The proportion of youth in New Hampshire reporting binge drinking in the past month was not statistically different than the other New England states.

While there appear to have been significant declines in the percent of youth nationwide reporting binge drinking since 2002-2003, (10.65% in 2002-2003 to 8.82% in 2008-2009), this has not been the case for New Hampshire.

FIGURE 11

Binge Alcohol Use in Past Month Ages 12-17

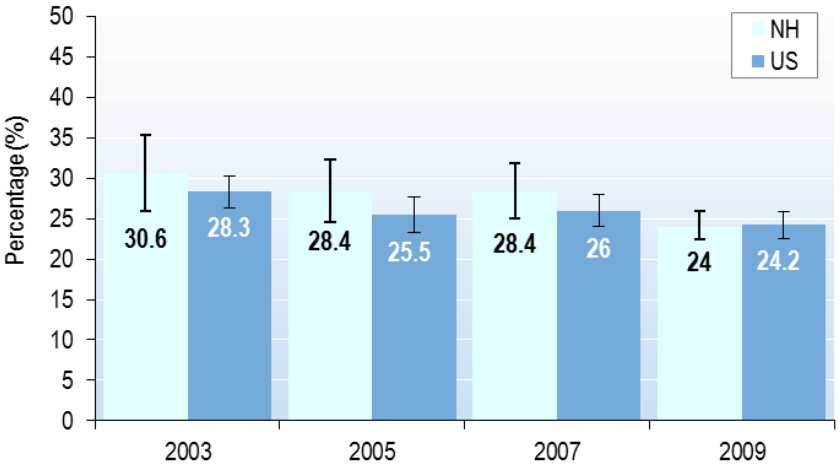


Source: National Survey on Drug Use and Health

The Youth Risk Behavior Survey (YRBS) also collects alcohol and drug use information from high school students. In contrast to the NSDUH, results from the 2009 YRBS show no significant difference in the proportion of New Hampshire students reporting drinking at least 5 drinks on one occasion within the past 30 days when compared to the national sample. Like the NSDUH, the 2009 YRBS also shows a significant decrease in the proportion of students in 9th through 12th grade nationally reporting drinking at least 5 drinks on one occasion within the past 30 days. Although the New Hampshire rates appear to mirror this decrease, the trend is not significant for New Hampshire.

FIGURE 12

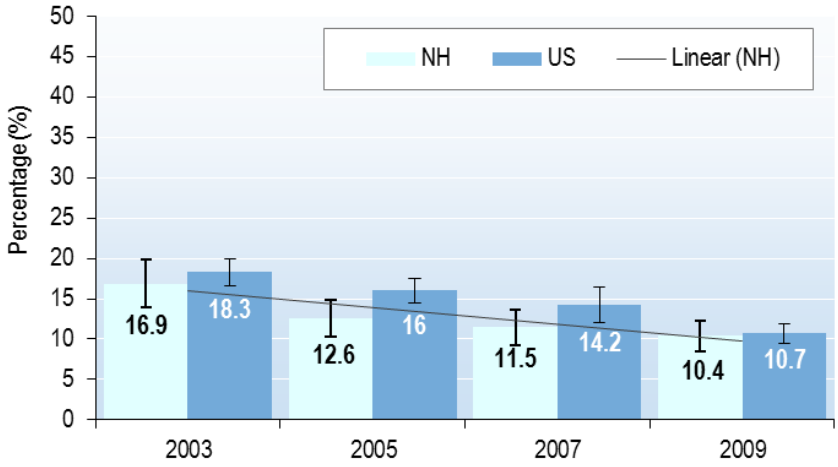
Students in 9th-12th Grade Who Reported Having 5+ Drinks at Least Once within the Past 30 Days



Source: Youth Risk Behavior Survey (2009)

FIGURE 13

Students in 9th-12th Grade Who Reported First Using Alcohol Before Age 13



The YRBS also collects information from high school students regarding the age at which they began using alcohol. According to the NH YRBS, the percentage of New Hampshire children who initiate drinking before the age of 13 has fallen significantly since 2003, from 16.9% of 9th to 12th graders in 2003, to 10.4% in 2009.

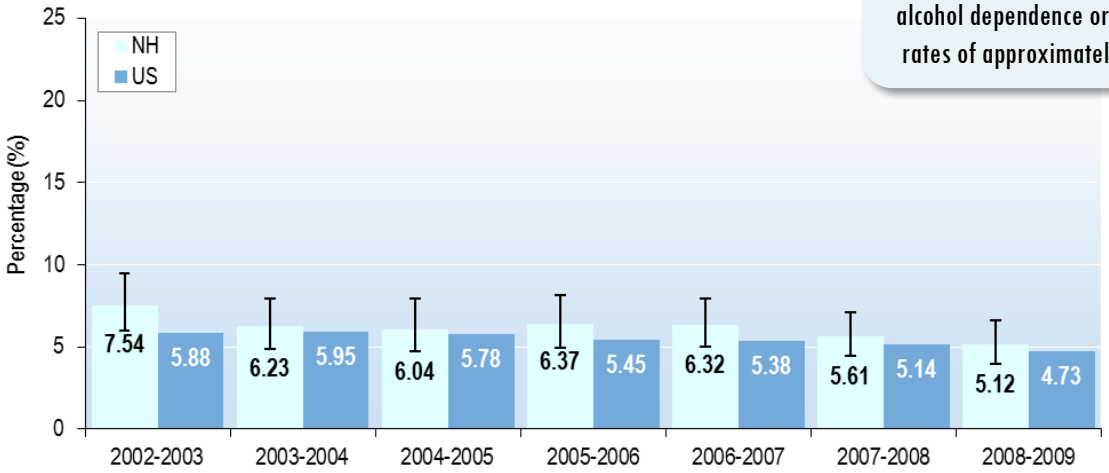
Source: Youth Risk Behavior Survey (2009)

New Hampshire youths aged 12-17 years have reported alcohol dependence or abuse at rates similar to the United States since 2002. In 2008 – 2009, New Hampshire's alcohol dependence or abuse rates for youth aged 12-17 were not statistically significantly different from the United States or any of the New England states.

FIGURE 14

Alcohol Dependence or Abuse in Past Year Ages 12-17

Youth in New Hampshire and the United States report alcohol dependence or abuse rates of approximately 5%.

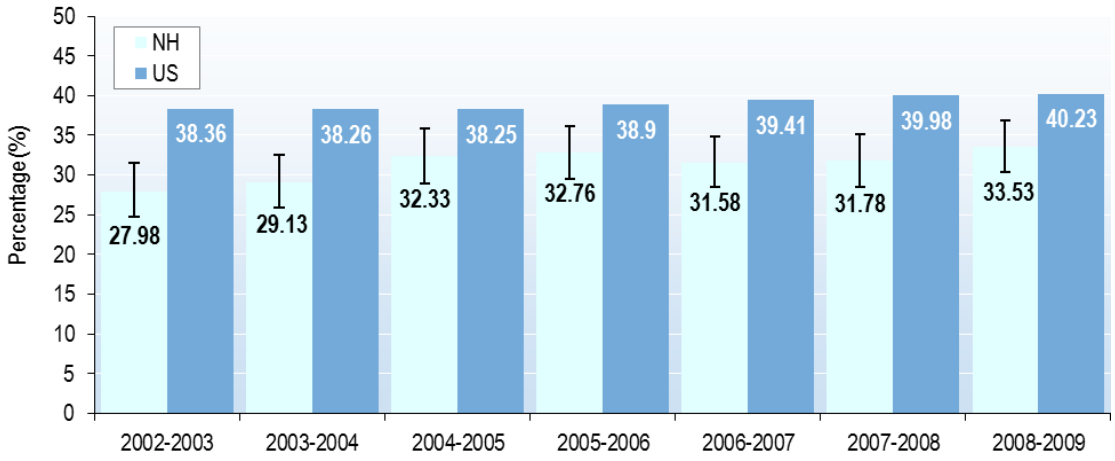


Source: National Survey on Drug Use and Health

About one third of 12-17 year olds have a perception of great risk of having five or more drinks. In 2008-2009, the proportion of young adults perceiving great risk of having five or more drinks is statistically significantly lower than the proportion of youths nationwide and likely lower for the time periods back to 2002-2003 (confidence intervals for the national estimate are not available). There has been no statistically significant change over time for New Hampshire or the United States.

FIGURE 15

Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week Ages 12-17



Source: National Survey on Drug Use and Health

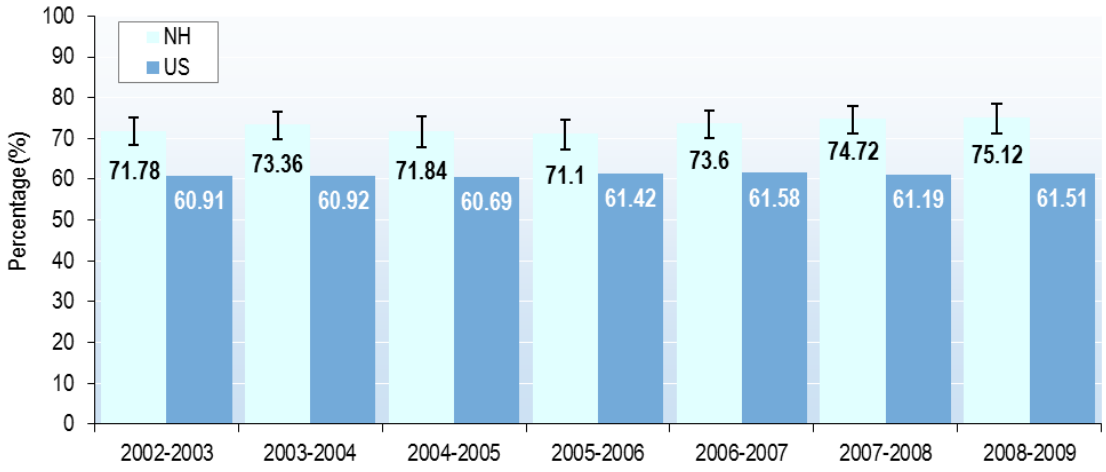
Alcohol Use, Dependence & Perceived Risk of Use Among New Hampshire Young Adults

Compared with young adults aged 18-25 nationwide, a higher percentage of New Hampshire's young adults aged 18-25 report alcohol use in the past month and binge alcohol use in the past month. While there has been no significant change in the proportion of New Hampshire young adults reporting alcohol use or binge alcohol use since 2002-2003, the proportion of New Hampshire users aged 18-25 is likely significantly above the United States rates for each time period.[4]

In 2008- 2009, the proportion of New Hampshire young adults reporting alcohol use and binge alcohol use in the past month was statistically equivalent to the other New England states, with the exception of Maine, which had a statistically significantly lower proportion of young adults reporting alcohol use in the past month compared to New Hampshire (NH: 75.12%; ME: 65.64%).

FIGURE 16

Alcohol Use in Past Month - Ages 18-25

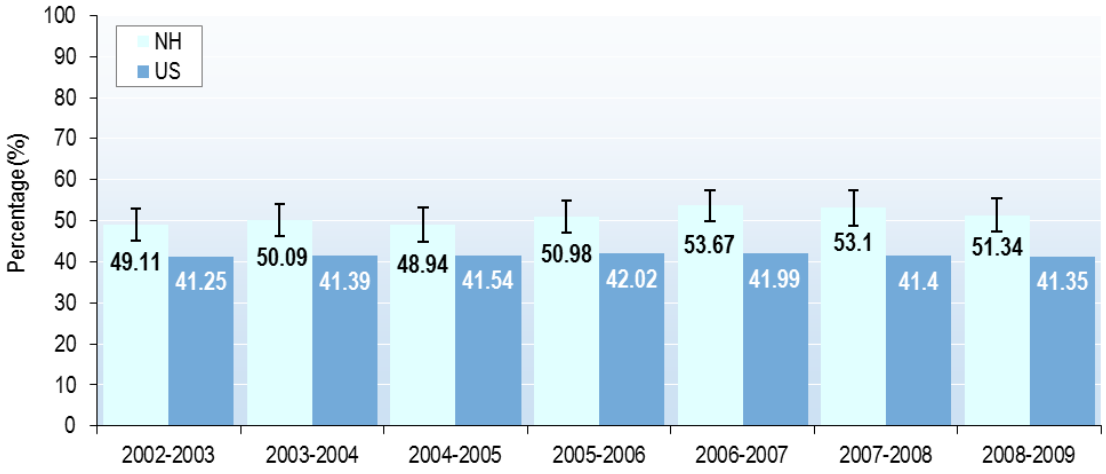


Source: National Survey on Drug Use and Health

[4] Confidence intervals for the US estimates for 2002-2003 through 2007-2008 are not available, however, the relatively tight confidence intervals found for national data on these measures are much smaller than the 8% to 14% differences reported between New Hampshire and United States values.

FIGURE 17

Binge Alcohol Use in Past Month Ages 18-25



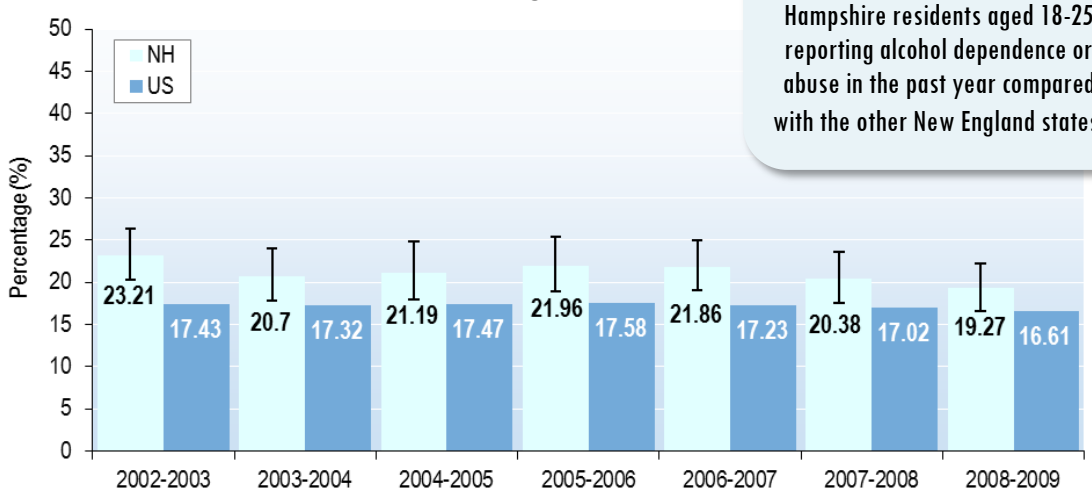
Source: National Survey on Drug Use and Health

The percentage of New Hampshire residents aged 18-25 reporting alcohol dependence or abuse in the past year is likely higher than the United States rate in the 2002-2003 period. New Hampshire's percentage is not statistically significantly higher than the United States for any other time period, including 2008-2009.

FIGURE 18

Alcohol Dependence or Abuse in Past Year - Ages 18-25

There is no statistically significant difference in the proportion of New Hampshire residents aged 18-25 reporting alcohol dependence or abuse in the past year compared with the other New England states.

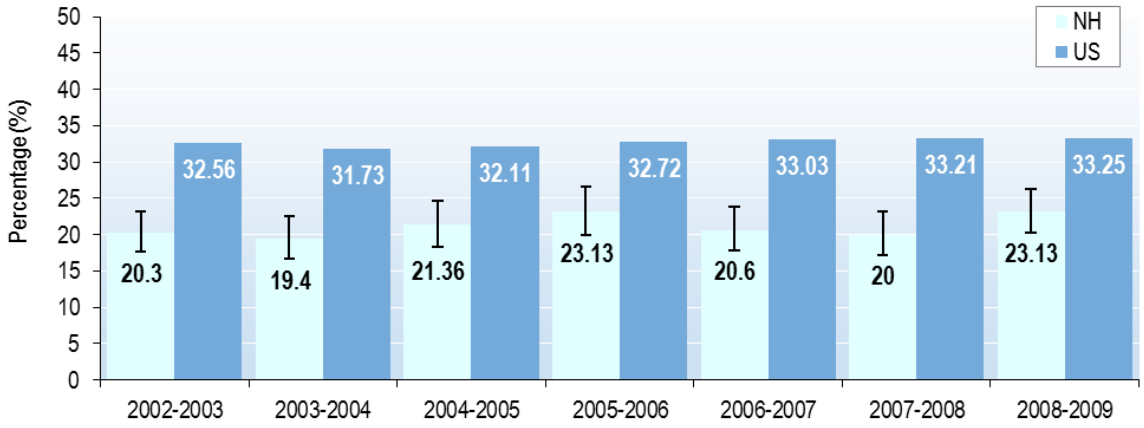


Source: National Survey on Drug Use and Health

Less than one quarter of 18-25 year olds responded that they perceive great risk of having five or more drinks once or twice per week. Over three quarters of this age group do not perceive great risk for this measure. New Hampshire is statistically significantly lower than the United States for 2008-2009 and likely lower than the United States since 2002-2003. The percentages show no statistical differences over time in terms of trends for New Hampshire or the United States.

FIGURE 19

Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week - Ages 18-25



Source: National Survey on Drug Use and Health

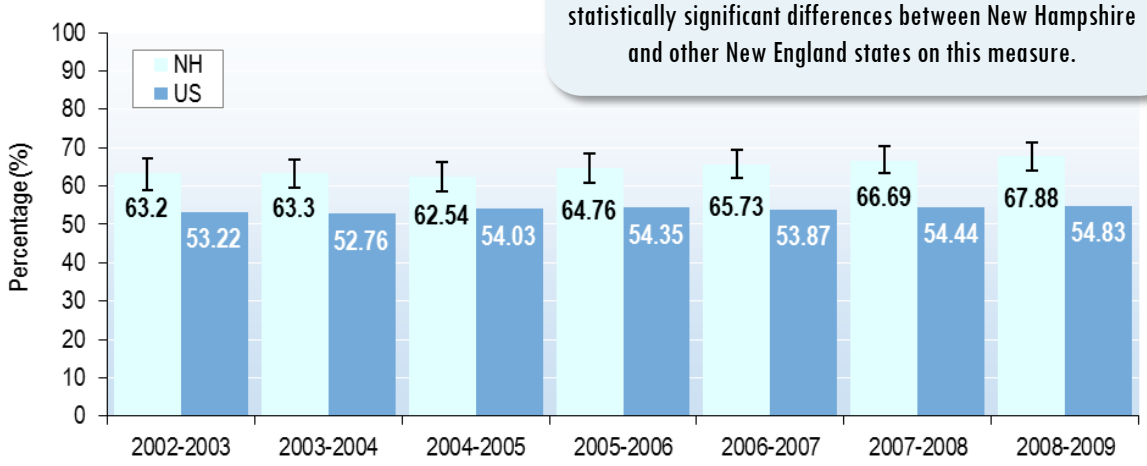
Alcohol Use, Dependence & Perceived Risk of Use Among New Hampshire Adults

Consistent with the younger age groups, a higher proportion of New Hampshire residents aged 26 and over report alcohol use in the past month than adults nationwide. For 2008-2009, the difference is statistically significant. For the time periods between 2002-2003 and 2007-2008 no confidence intervals for the U.S. estimates are available, although the difference is likely significantly higher given the point differential and relatively tight United States confidence intervals.

FIGURE 20

Alcohol Use in Past Month - Ages 26+

Regionally, New Hampshire has a higher proportion of adults aged 26 and over reporting alcohol use in the past month (67.88%) than Maine (58.12%). There were no statistically significant differences between New Hampshire and other New England states on this measure.

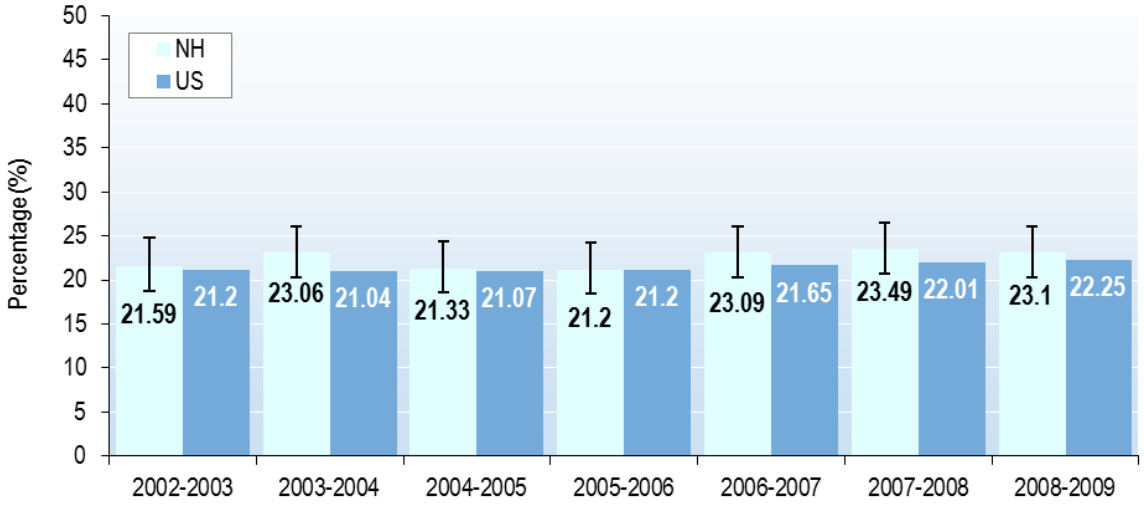


Source: National Survey on Drug Use and Health

The following two charts represent binge alcohol use in the past month and alcohol dependence and abuse for adults aged 26 and over. For both of these measures, there is no statistically significant difference between New Hampshire and the United States. There was also no statistically significant difference between New Hampshire and the other New England states on these measures in 2008- 2009.

FIGURE 21

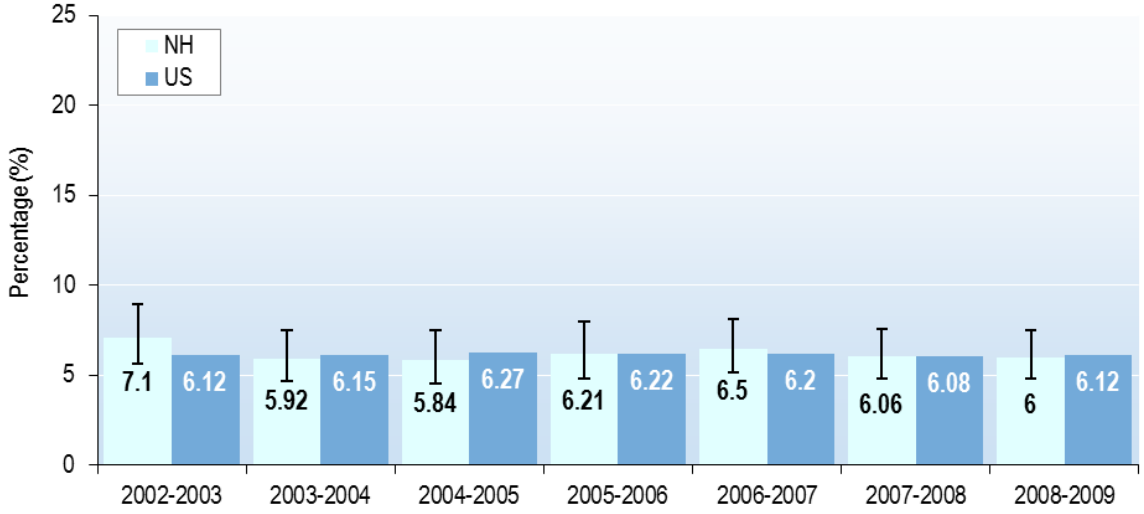
Binge Alcohol Use in Past Month - Ages 26+



Source: National Survey on Drug Use and Health

FIGURE 22

Alcohol Dependence or Abuse in Past Year – Age 26+

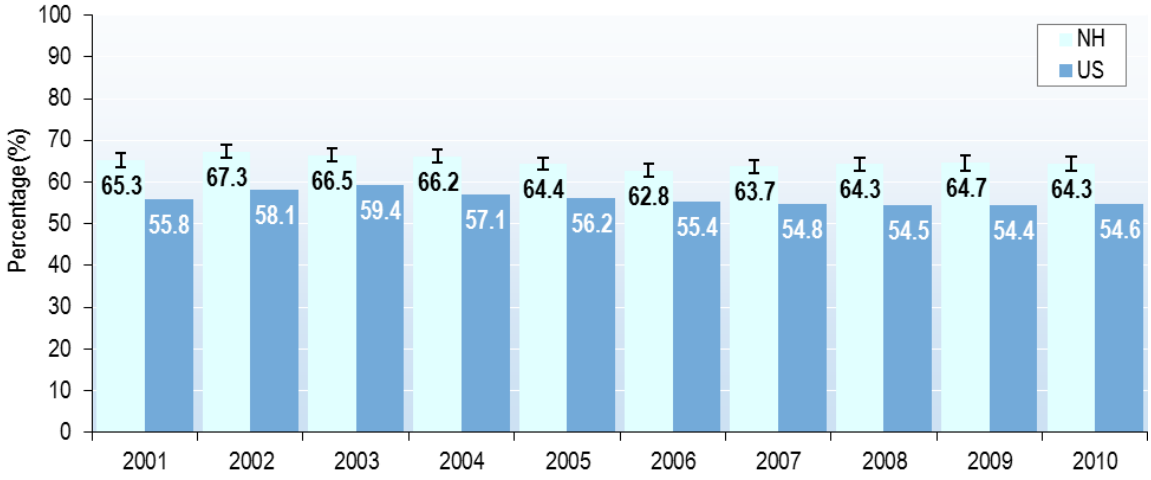


Source: National Survey on Drug Use and Health

Another major national survey, the Behavioral Risk Factor Surveillance Survey (BRFSS) also captures information on alcohol in the past 30 days for adults aged 18 and older. Consistent with the NSDUH, results from the BRFSS show that a likely significant difference in the proportion of adults aged 18 and older report having used alcohol in the past 30 days compared to the nation as a whole. Confidence intervals for the U.S. estimates were not available, however, the point spread was large at about 10%. Typically, the United States confidence intervals are small and would not account for such a large percentage difference.

FIGURE 23

Alcohol Use in Past 30 Days – Adults

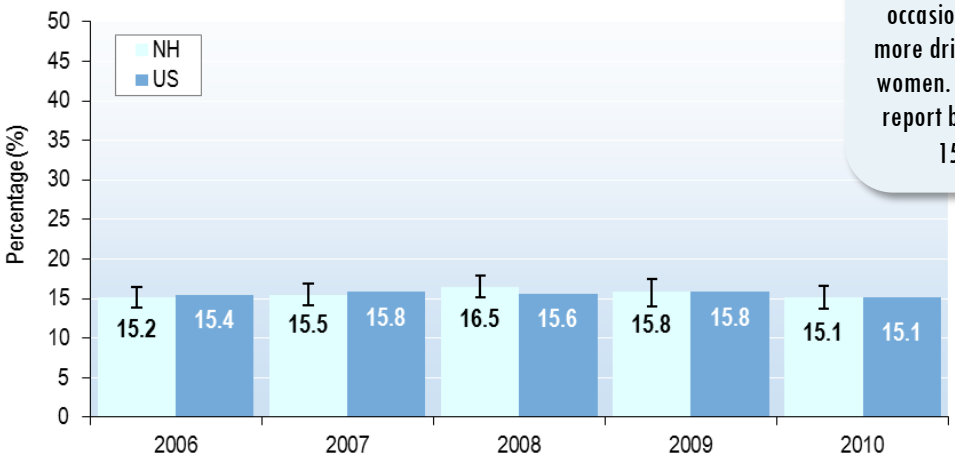


Source: Behavioral Risk Factor Surveillance Survey

The BRFSS results of alcohol use in the past 30 days also show statistically significant differences in the proportion of adults in New Hampshire and nationwide reporting binge drinking in the past month.

FIGURE 24

Binge Drinkers (Men 5+; Women 4+ Drinks on One Occasion)

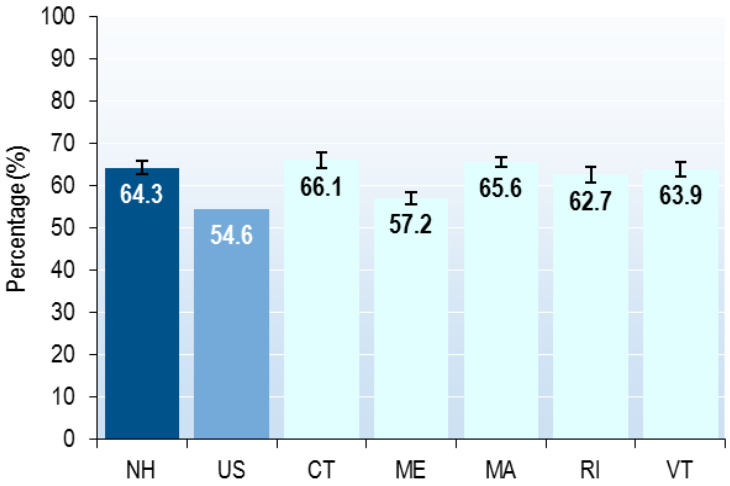


BRFSS defines binge drinking as five or more drinks on one occasion for men, and four or more drinks on one occasion for women. New Hampshire adults report binge drinking at about 15%, consistently.

Source: Behavioral Risk Factor Surveillance Survey

FIGURE 25

Alcohol Use in Past 30 Days - Adults

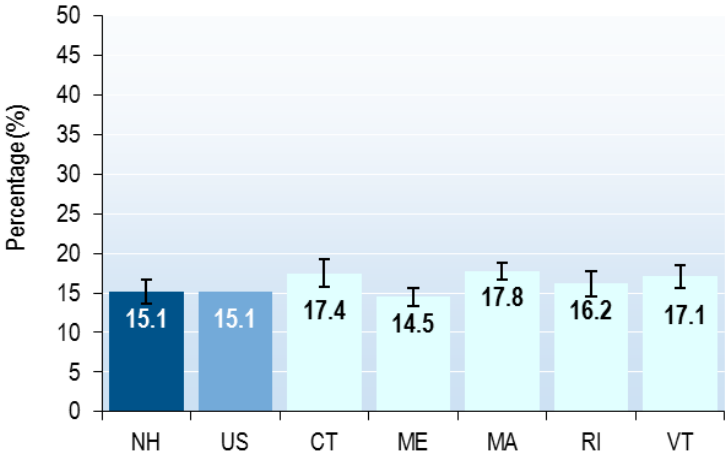


Correspondingly, New Hampshire adults report higher percentages of alcohol use in the past 30 days (64.3%) than both the United States (54.6%) and Maine (57.2%) on a regional basis. New Hampshire is statistically equivalent to the other New England states for 30 day alcohol use.

Source: Behavioral Risk Factor Surveillance Survey (2010)

FIGURE 26

Binge Drinkers (Men 5+; Women 4+ Drinks on One Occasion)

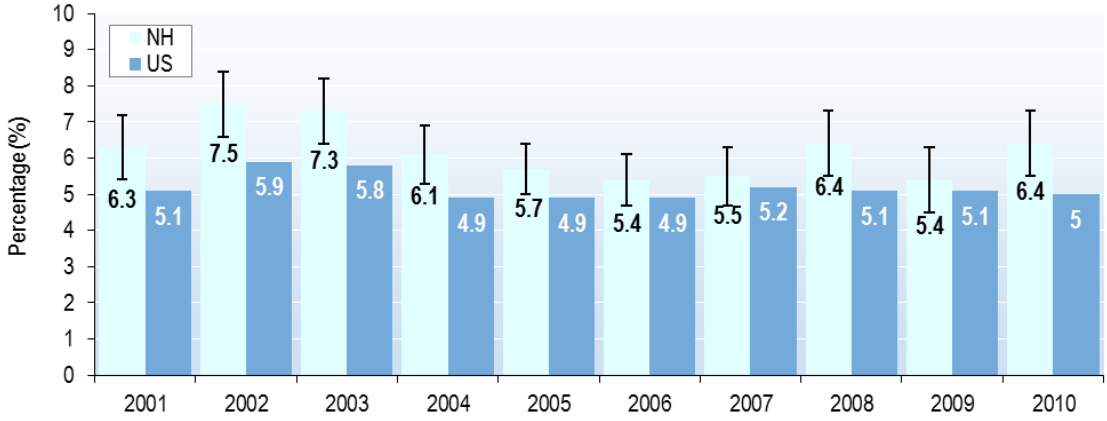


Source: Behavioral Risk Factor Surveillance Survey (2010)

BRFSS results mirror NSDUH results for adult binge drinking as compared to New England. At 15.1%, New Hampshire is essentially the same as the United States and the New England states on this measure. The BRFSS has an additional category of heavy drinkers not identified by NSDUH. Confidence intervals for the United States data were not available.

FIGURE 27

Heavy Drinkers (Men 2; Women 1 Drink Per Day)

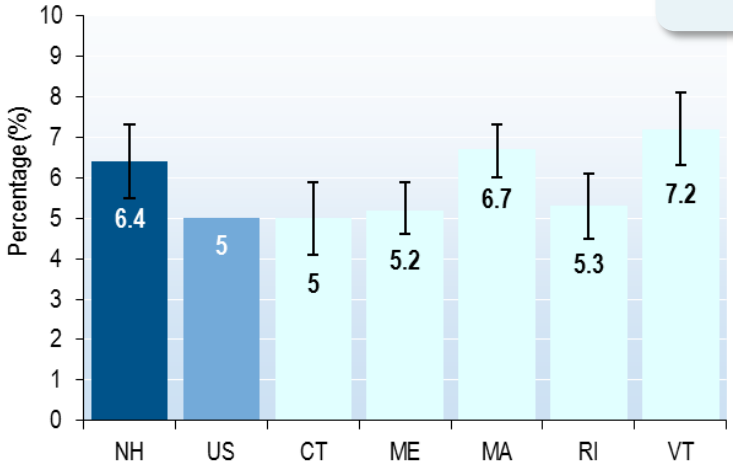


Source: Behavioral Risk Factor Surveillance Survey

FIGURE 28

Heavy Drinkers (Men 2; Women Drink(s) Per Day)

New Hampshire was similar to New England states for adult heavy drinkers.

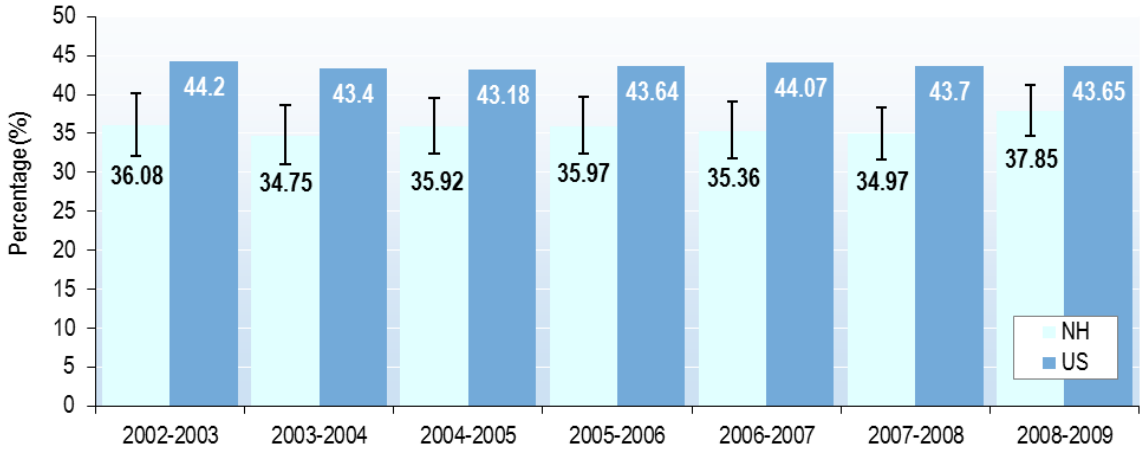


Source: Behavioral Risk Factor Surveillance Survey (2010)

In 2008-2009, almost 40% of those aged 26 and over perceived great risk of having five or more drinks once or twice per week, a proportion that is statistically significantly lower than the United States for 2008-2009 and likely in previous years (confidence intervals for the U.S. estimates are not available). Trends for both New Hampshire and the United States have been consistent over time.

FIGURE 29

Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week - Age 26+



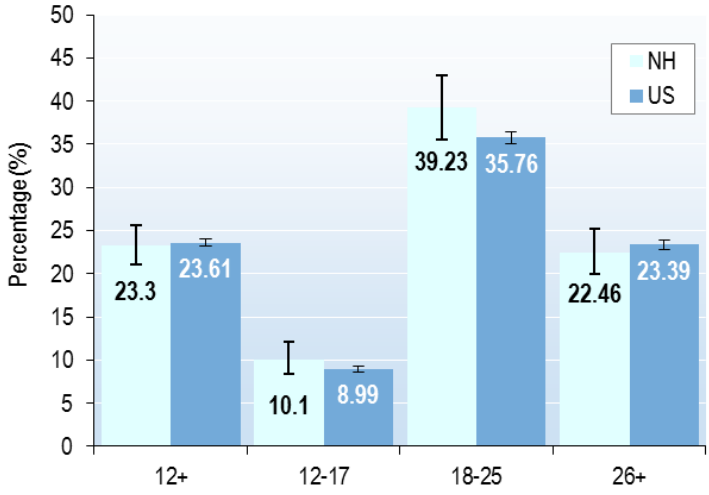
Source: National Survey on Drug Use and Health

Tobacco

Nearly 40% of young adults aged 18- 25 reported cigarette use in the past month in New Hampshire, in 2008-2009. About 10% of youth aged 12-17 and 22% of adults aged 26 and over report cigarette use in the past month. New Hampshire cigarette use in the past month is similar to United States averages for each age group in 2008-2009.

FIGURE 30

Cigarette Use in Past Month (2008-2009)



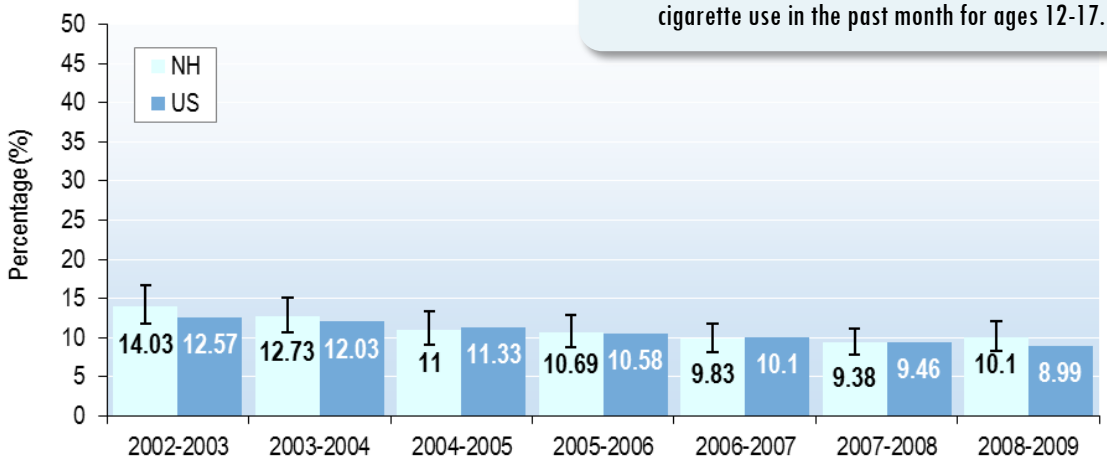
Source: National Survey on Drug Use and Health (2008-2009)

Past month cigarette use in 12-17 year olds is similar to United States averages. The United States past cigarette use in this age group has declined since 2002-2003 and 2003-2004. New Hampshire 12-17 year old past month cigarette use does not show a statistically significant trend in this time period.

FIGURE 31

Cigarette Use in Past Month - Ages 12-17

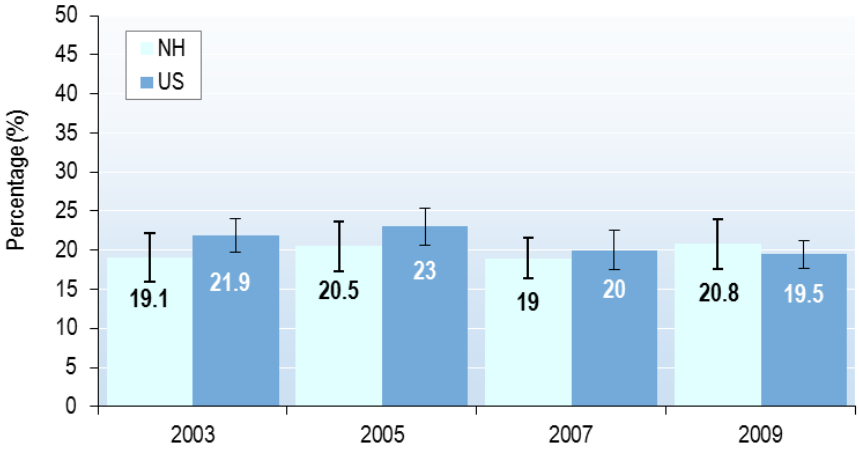
There are no statistically significant differences between New Hampshire and the other New England states for cigarette use in the past month for ages 12-17.



Source: National Survey on Drug Use and Health

FIGURE 32

Students in 9th-12th Grade Reporting Any Use of Cigarettes in the Past 30 Days



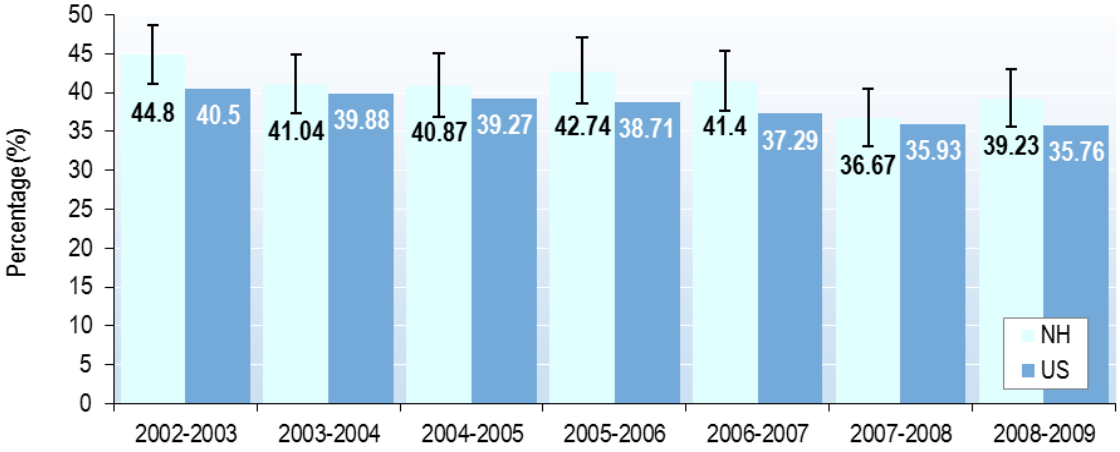
The results of the YRBS show no trends or statistically significant differences between New Hampshire and the nation for students in grades 9 through 12 for any use of cigarettes in the past 30 days between 2003 and 2009 with use reported consistently near 20%.

Source: Youth Risk Behavior Survey

Longitudinally, New Hampshire cigarette use in the past month for those aged 18- 25 in was statistically significantly lower in 2007-2008 as compared to 2002-2003. United States rates appear to be lower than New Hamsphire's for 18- 25 year olds in 2006-2007, but no United States confidence intervals were available to confirm this relationship.

FIGURE 33

Cigarette Use in Past Month - Ages 18-25



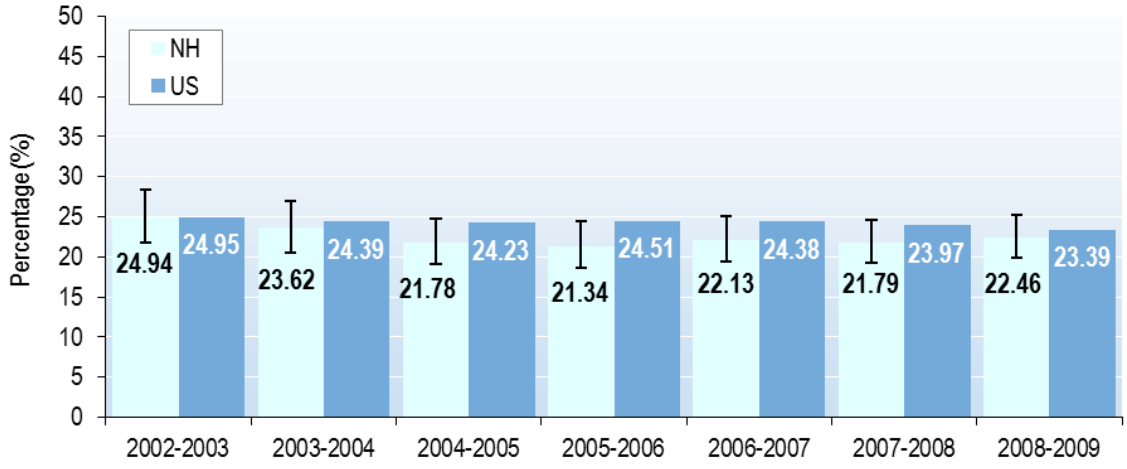
Source: National Survey on Drug Use and Health

Regionally, Maine (69%) had a statistically significantly higher percentage of 18 to 25 year olds with cigarette use in the past month than the United States average (67%). New Hamsphire and the other New England states are similar to the United States' average.

Cigarette use in the past month for adults aged 26 and over remained largely constant in the 22% to 25% range between 2002-2003 and 2008-2009. New Hamsphire rates were likely lower than the nation in 2005-2006, but no confidence intervals for the United States were available for this period.

FIGURE 34

Cigarette Use in Past Month - Ages 26+

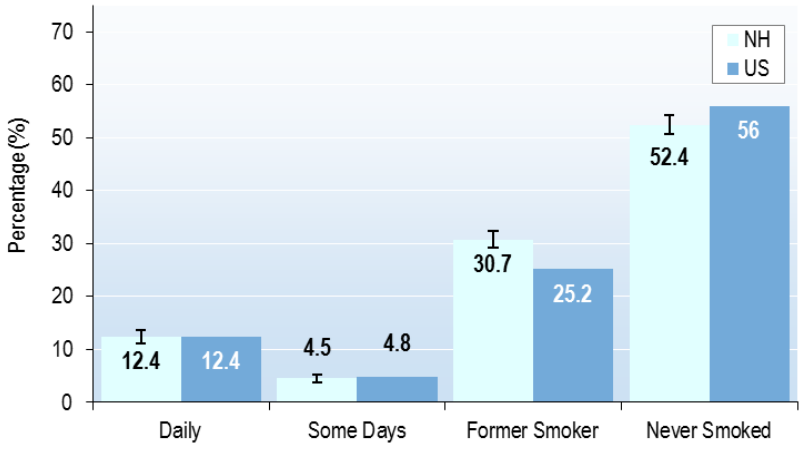


Source: National Survey on Drug Use and Health

New Hampshire adults age 26 and over have similar rates of cigarette use in the past month as do the other New England states and the United States average.

FIGURE 35

Four Level Smoking Status (2010)



The BRFSS reports smoking responses in four categories or levels of smoking status. New Hamsphire residents report essentially the same status as the United States for *Daily* smoking on smoking on *Some Days*. New Hampshire is likely statistically higher than the United States on Former Smokers and lower in the Never Smoked category.

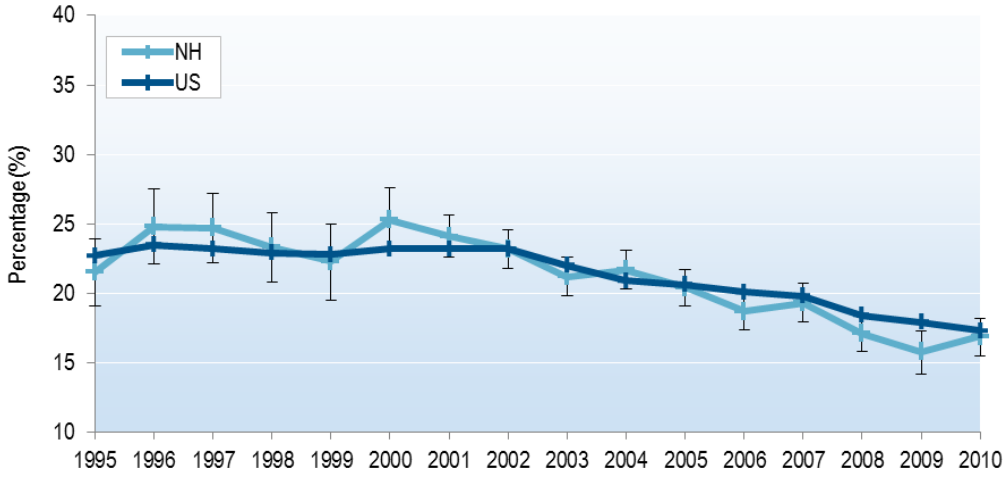
Source: Behavioral Risk Factor Surveillance Survey

There are no United States confidence intervals available, but the differences are outside the New Hampshire confidence intervals by a wide margin. This data would suggest that New Hampshire has a higher quit rate than does the United States as a whole.

The following chart shows those New Hampshire adults who respond as *Current Smokers*, which includes those who smoke on some days and those who smoke daily. New Hampshire trends have closely followed the United States trends. There is a statistically significant declining trend, particularly from 2000 (25.3%) through 2009 (15.8%).

FIGURE 36

Current Smokers

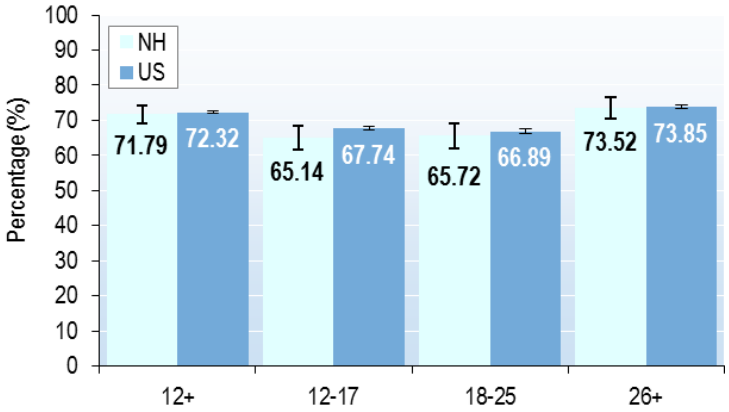


Source: Behavioral Risk Factor Surveillance Survey

Perceptions of great risk of smoking one or more packs of cigarettes per day are the statistically significantly lowest among New Hampshire residents aged 12-17 and 18-25 at about 65%. They were statistically significantly highest among adults aged 26 and over at nearly 74%. Compared to the nation, the perceptions of great risk are equivalent by age group.

FIGURE 37

Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day (2008-2009)

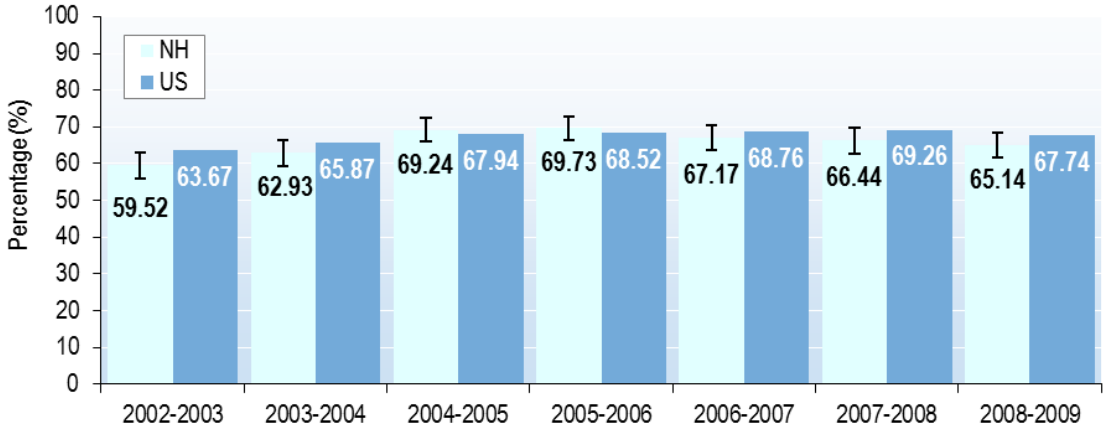


Source: National Survey on Drug Use and Health

For youth ages 12- 17, perceptions of great risk of smoking one or more packs of cigarettes per day were statistically significantly higher than 2002-2003 (64%) in 2004-2005 (68%), 2005-2006, and 2006-2007 (both 69%). Although, there are no confidence intervals available for the United States between 2002-2003 and 2007-2008, the perception of great risk for the United States appears to be lower in 2002-2003 (64%) than all of the other time periods.

FIGURE 38

Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day - Ages 12-17

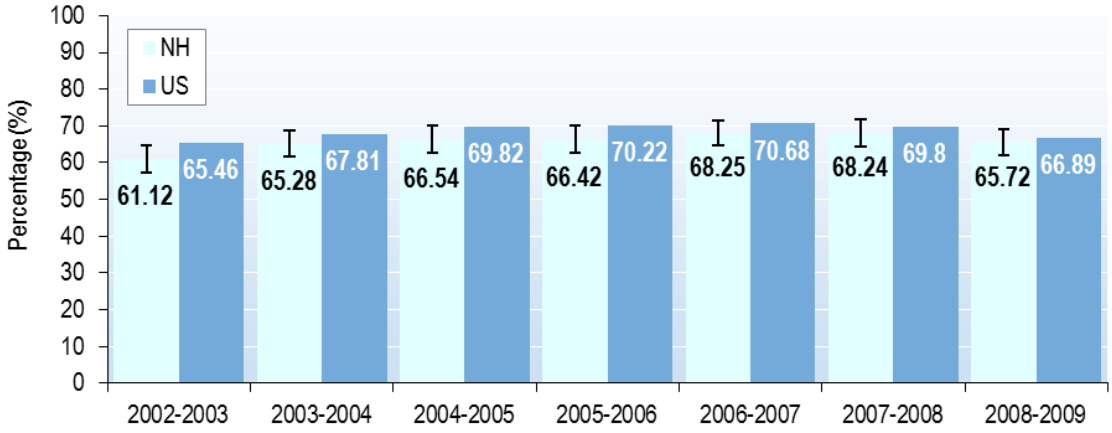


Source: National Survey on Drug Use and Health

New Hampshire young adults ages 18 to 25 do not report any statistically significant differences in time or from the United States averages for perceptions of great risk of smoking one or more packs of cigarettes per day. It is likely that the national rate in 2002-2003 is lower than 2008-2009, however confidence intervals were available for the United States for 2002-2003.

FIGURE 39

Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day - Ages 18-25

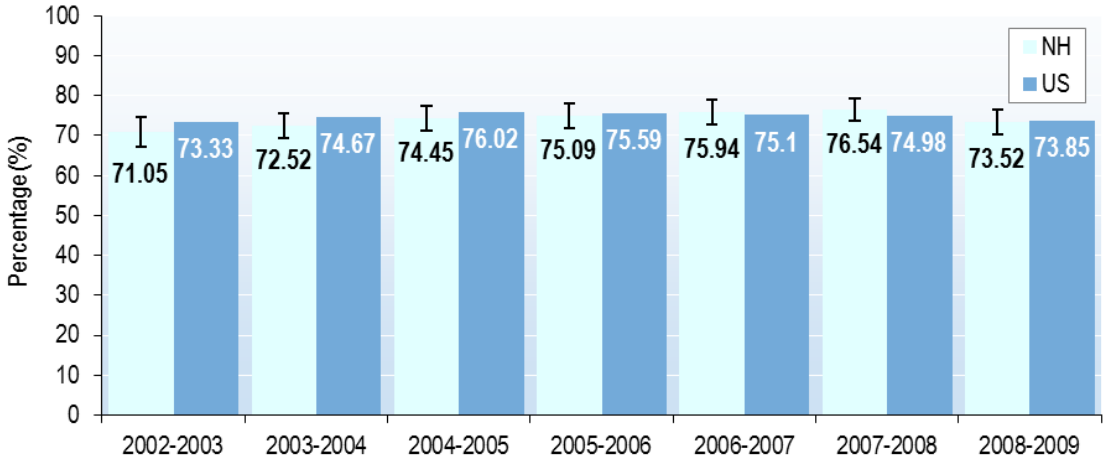


Source: National Survey on Drug Use and Health

There are no statistically significant differences over the 2002-2003 to 2008-2009 time period for adults aged 26 and over perceptions ofgreat risk of smoking one or more packs of cigarettes per day. There are also no statistically significant differences between New Hampshire and the nation on this indicator.

FIGURE 40

Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day - Age 26+

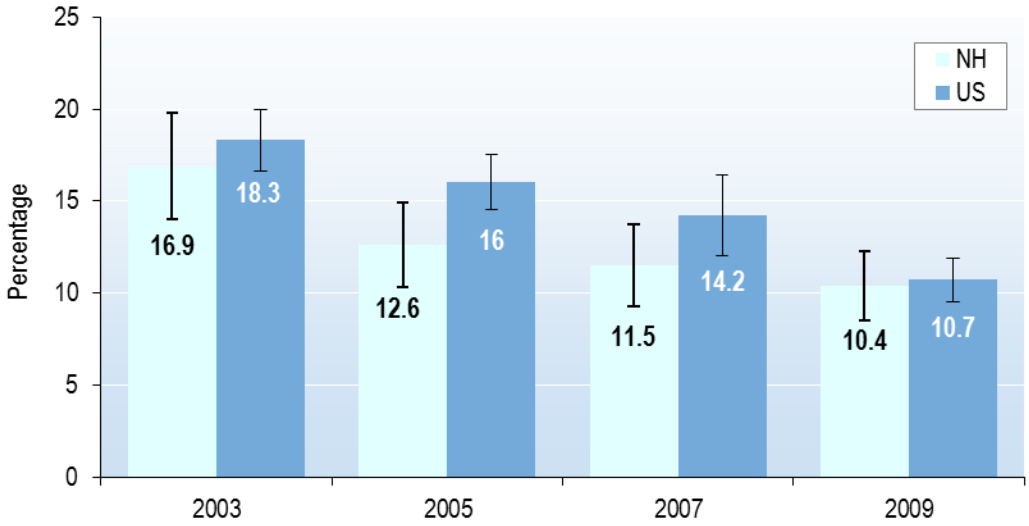


Source: National Survey on Drug Use and Health

There were no regional differences amongst the New England states in terms of perceptions of great risk from smoking one or more packs of cigarettes per day. New Hampshire was similar to the other states in New England and also to the United States averages.

FIGURE 41

Students in 9th-12th Grade Initiating Tobacco Use Before Age 13



Source: NH Youth Rish Behavior Survey

There was a statistically significant declining trend in New Hampshire students initiating tobacco use before the age of 13 for the years of 2003, 2005, 2007 and 2009. The national averages follow a similar trend with no statistically significant differences between New Hampshire and the United States.

Marijuana Use in New Hampshire

The use of other drugs, including marijuana, is important to consider in determining state priorities. According to the NSDUH, the rate of past year and past month marijuana use in New Hampshire is significantly higher than the national average across all age groups.

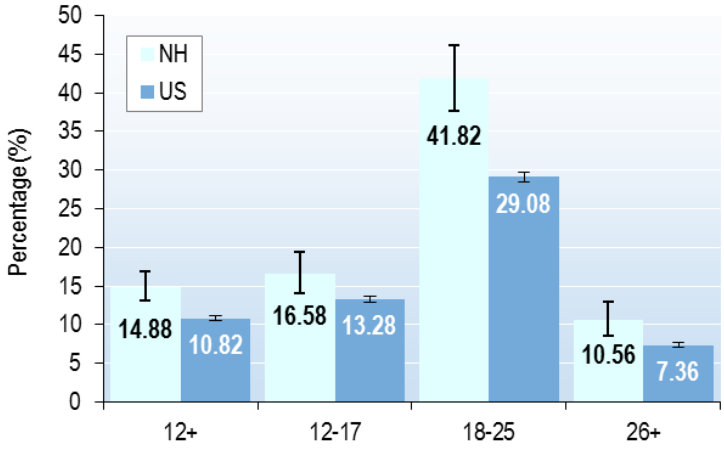
Looking at trends in marijuana use over time, there have been no significant changes in the proportion of individuals in New Hampshire reporting past year marijuana use between 2002-2003 and 2008-2009. There have also been no changes in the proportion of individuals reporting having used marijuana in the past month over this same time period.

However, in 2008 and 2009, New Hampshire had a statistically significantly higher proportion of people aged 12 and over reporting marijuana use in the past year (New Hampshire 14.88%; United States 10.82%) and in the past month (New Hampshire 9.67%; United States 6.36%).

Compared with the nation, all of the New England states except Connecticut have significantly higher rates of past year and past month marijauna use for people aged 12 and over. There are no statistically significant differences between New Hampshire's rates and the rates of the other New England states for marijuana use in the past year by people aged 12 and over.

FIGURE 42

Marijuana Use in Past Year (2008-2009)



Source: National Survey on Drug Use and Health

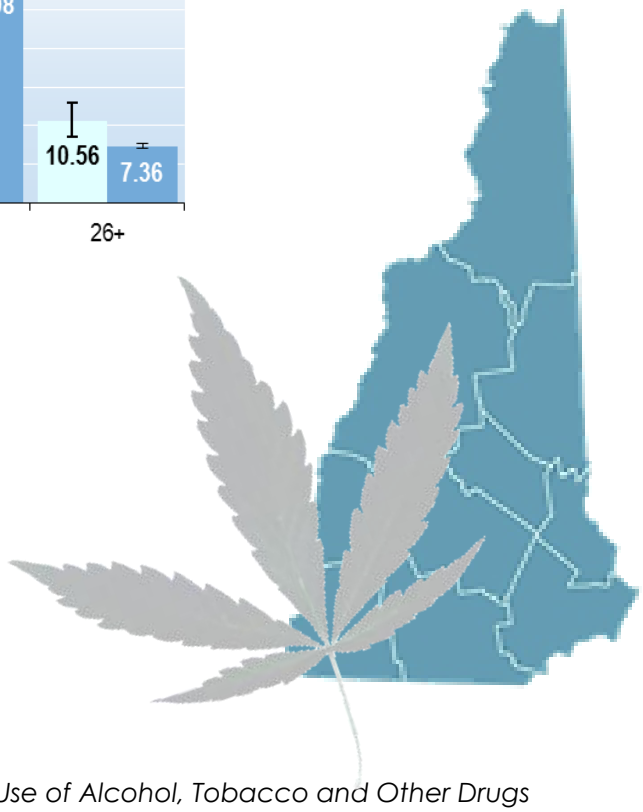
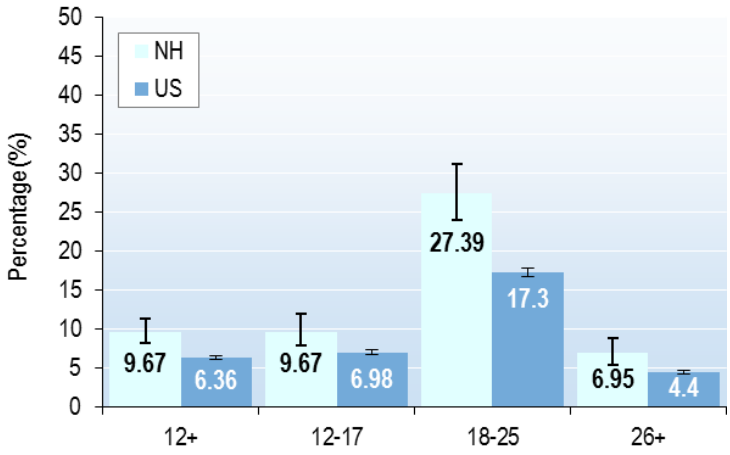


FIGURE 43

Marijuana Use in Past Month (2008-2009)



Source: National Survey on Drug Use and Health

Marijuana Use Among New Hampshire Youth

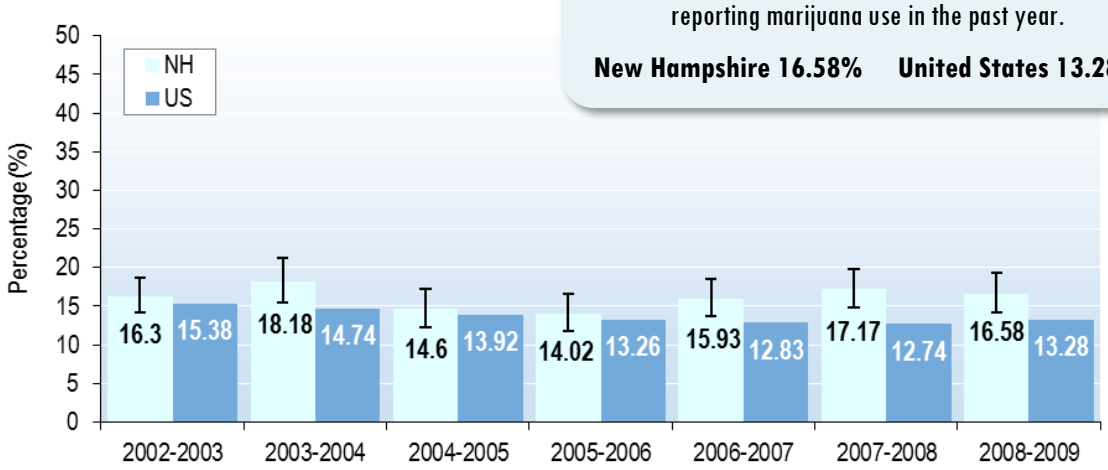
There has been no statistically significant change in the proportion of New Hampshire youths aged 12-17 who reported past year or past month marijuana use between 2002-2003 and 2008-2009.

FIGURE 44

Marijuana Use in Past Year - Ages 12-17

In 2008 and 2009, New Hampshire had a statistically significantly higher proportion of people aged 12-17 reporting marijuana use in the past year.

New Hampshire 16.58% **United States 13.28%**



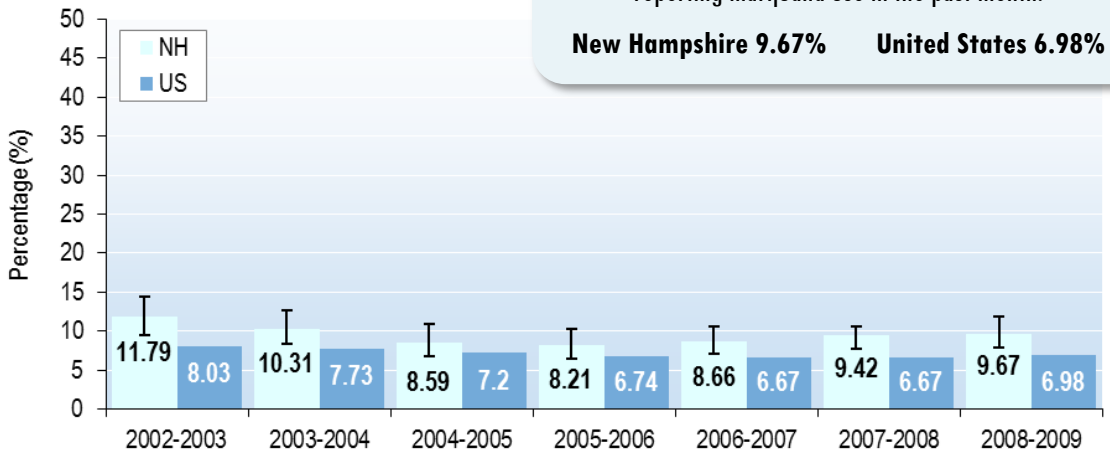
Source: National Survey on Drug Use and Health

FIGURE 45

Marijuana Use in Past Month - Ages 12-17

In 2008 and 2009, New Hampshire had a statistically significantly higher proportions of people aged 12-17 reporting marijuana use in the past month.

New Hampshire 9.67% **United States 6.98%**

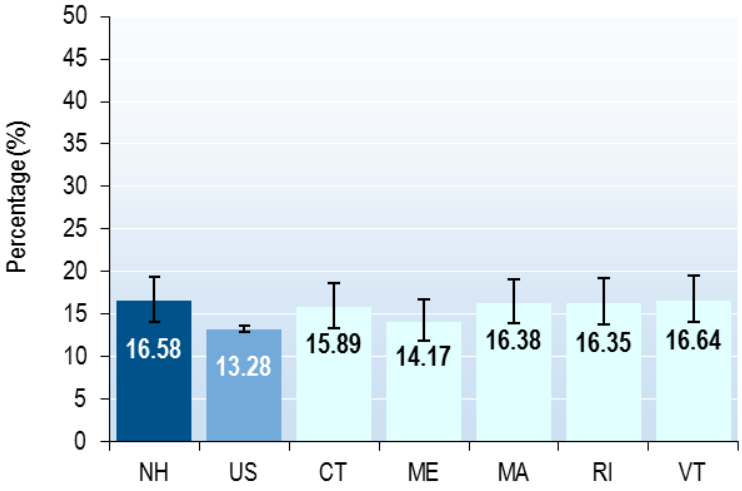


Source: National Survey on Drug Use and Health

FIGURE 46

Marijuana Use in Past Year - Ages 12-17 (2008-2009)

Compared with the nation, all of the New England states except Connecticut and Maine have significantly higher rates of marijauna use in the past year for people aged 12-17 for 2008-2009.

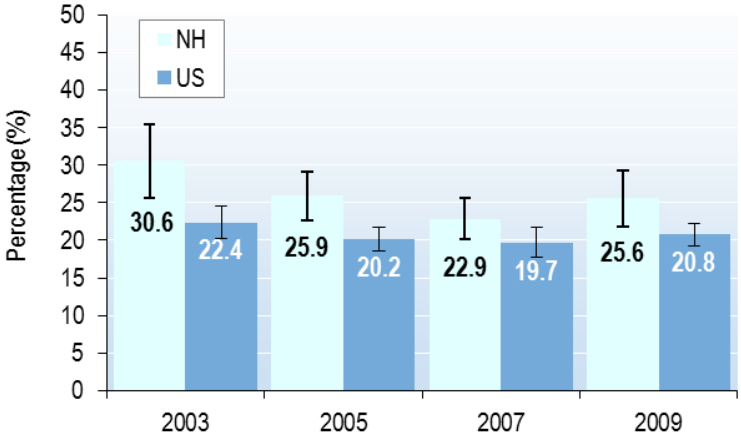


Source: National Survey on Drug Use and Health

Looking regionally, there are no statistically significant differences between the proprotion of 12-17 year olds in New Hampshire and the other New England states who reported past year or past month marijuana use.

FIGURE 47

Students in 9th-12th Grade Reporting Any Use of Marijuana in Past 30 Days



Source: Youth Risk Behavior Survey

New Hampshire's higher initiation rates appear to be being driven by initiators in the 18 – 25 year old age group. For every year since 2002-2003, including 2008 – 2009, a significantly higher proportion of young adults aged 18-25 report having initiated marijuana use compared to the nation overall. Figure 47 shows the relative percentages of initiating marijuana use by age group.

Marijuana Use Among New Hampshire Young Adults

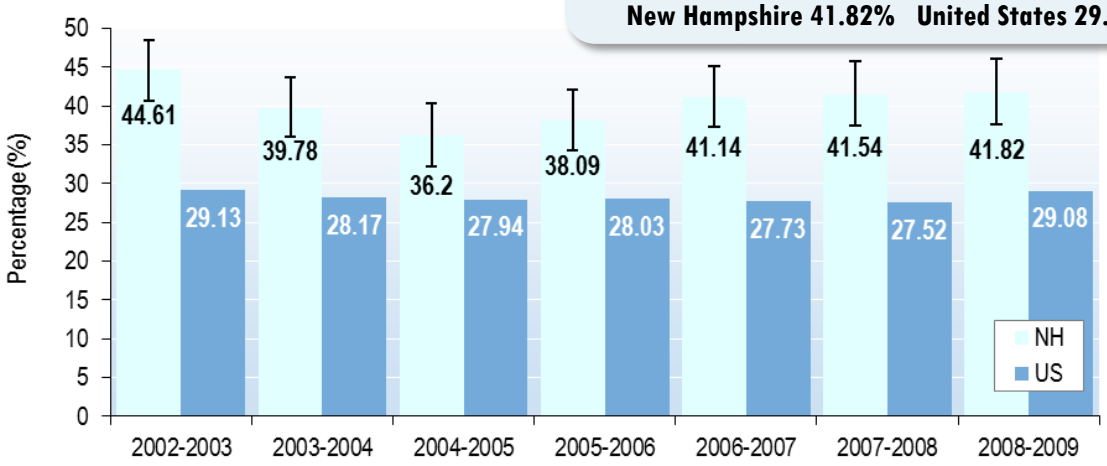
There has been no statistically significant change in the proportion of New Hampshire young adults aged 18-25 who reported using marijuana in the past year, or who reported using marijuana in the past month, between 2002-2003 and 2008-2009.

FIGURE 48

Marijuana Use in Past Year - Ages 18-25

The proportion of 18- 25 year olds in New Hampshire who report having used marijuana in the past year is statistically significantly higher than that of the nation.

New Hampshire 41.82% United States 29.08%



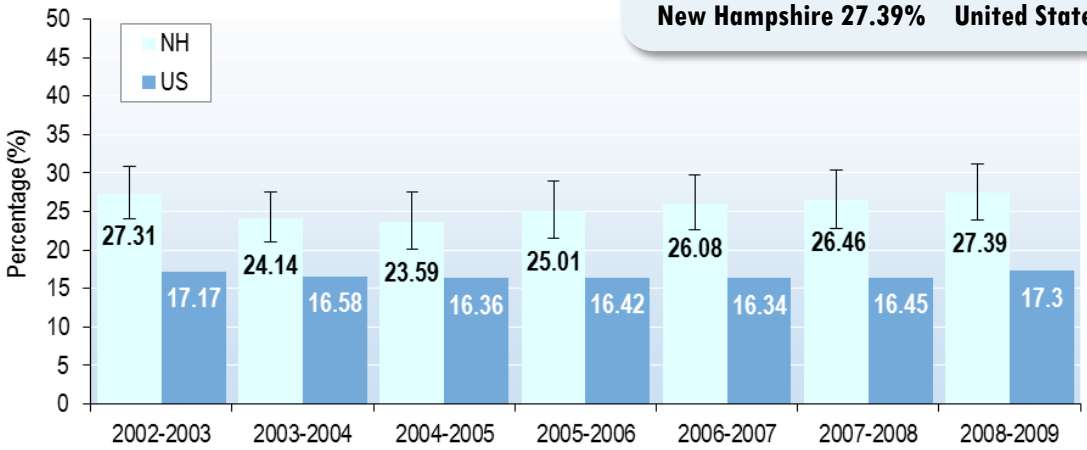
Source: National Survey on Drug Use and Health

FIGURE 49

Marijuana Use in Past Month - Ages 18-25

A statistically significantly higher proportion of New Hampshire 18-25 year olds report marijuana use in the past month.

New Hampshire 27.39% **United States 17.3%**



Source: National Survey on Drug Use and Health

Young adults aged 18 – 25 from every New England state report statistically significantly higher rates of marijuana use in the past year and in the past month than young adults nationwide. There are no statistically significant differences in past year or past month use rates for this age group among the New England states.

Marijuana Use Among New Hampshire Adults

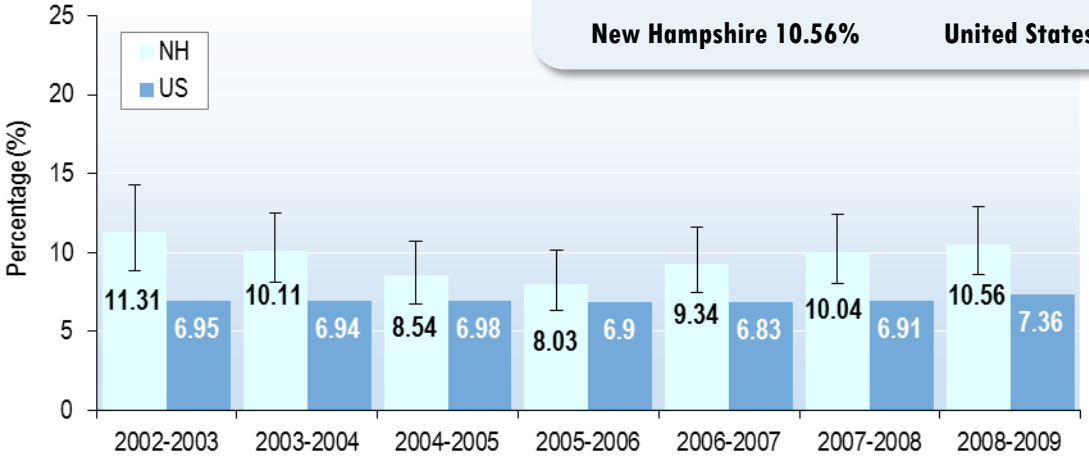
Looking at trends over time, there has been no statistically significant change in the proportion of New Hampshire adults aged 26+ who reported using marijuana in the past year or in the past month between 2002-2003 and 2008-2009.

FIGURE 50

Marijuana Use in Past Year – Age 26+

Compared with the nation, in 2008-2009 a statistically significantly greater proportion of New Hampshire adults aged 26+ report having used marijuana in the past year.

New Hampshire 10.56% **United States 7.36%**



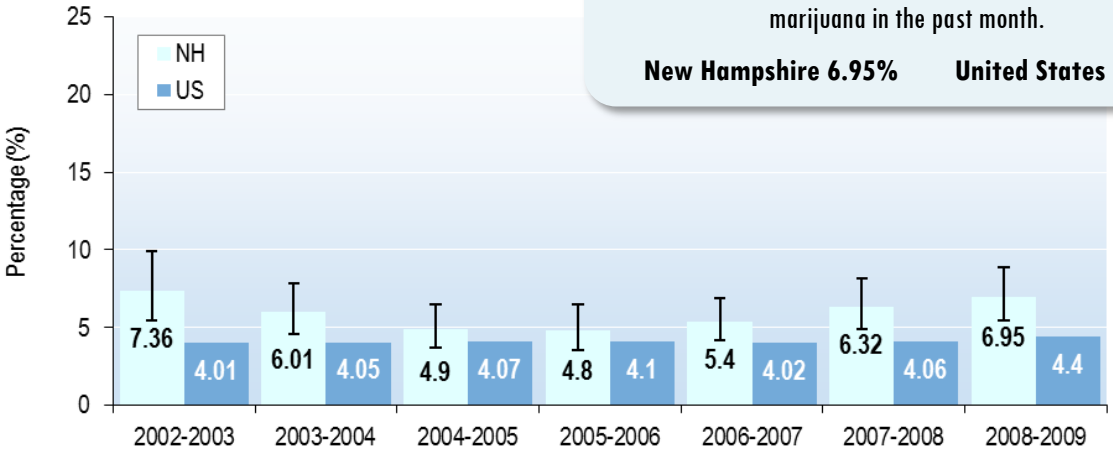
Source: National Survey on Drug Use and Health

FIGURE 51

Marijuana Use in Past Month – Age 26+

In 2008-2009 a statistically significantly greater proportion of New Hampshire adults aged 26+ report having used marijuana in the past month.

New Hampshire 6.95% **United States 4.4%**



Source: National Survey on Drug Use and Health

Looking regionally, there are no statistically significant differences between the proprotion of adults aged 26+ in New Hampshire and the other New England states who report marijuana use in the past year .

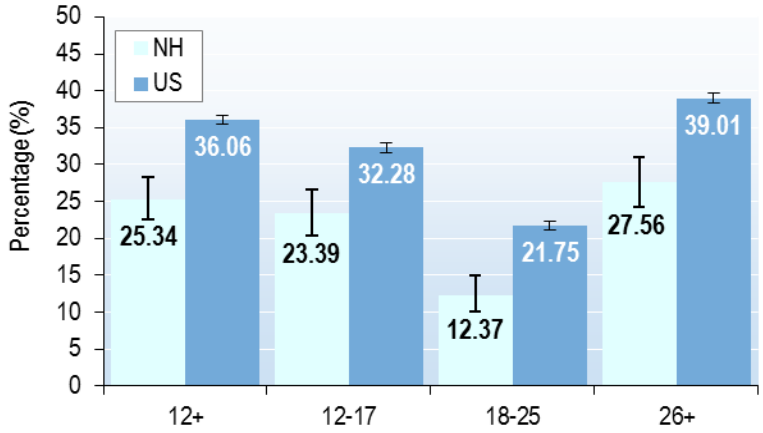
Compared with the nation, all of the New England states except Connecticut and Rhode Island have significantly higher rates of marijauna use in the past year for people aged 26+. In 2008-2009, all of the New England states except Connecticut and Massachusetts have a higher proportion of individuals aged 26+ reporting use of marijuana in the past month.

Perception of Risk Associated With Marijuana Use

The NSDUH addresses perceptions of risk of marijuana use. New Hampshire residents of all ages are significantly less likely to perceive a great risk from smoking marijuana once per month when compared to the nation.

FIGURE 52

Perceptions of Great Risk of Smoking Marijuana Once a Month



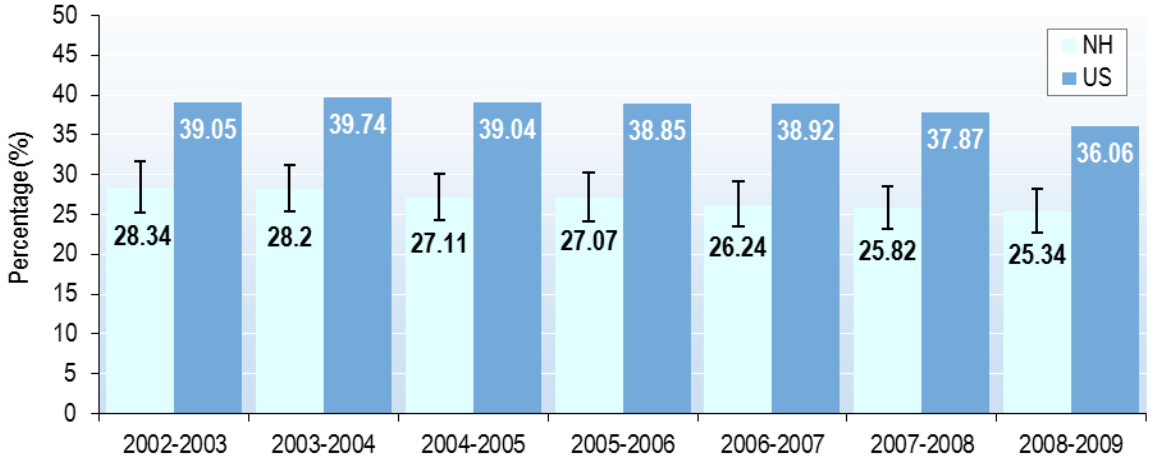
Source: National Survey on Drug Use and Health (2008-2009)

New Hampshire's 18-25 year olds are significantly less likely that those in other age groups to perceive a risk.

Looking at trends in perceived risk since 2002-2003, there has been no change in the proportion of New Hampshire residents perceiving great risk from smoking marijuana once a month for any age group.

FIGURE 53

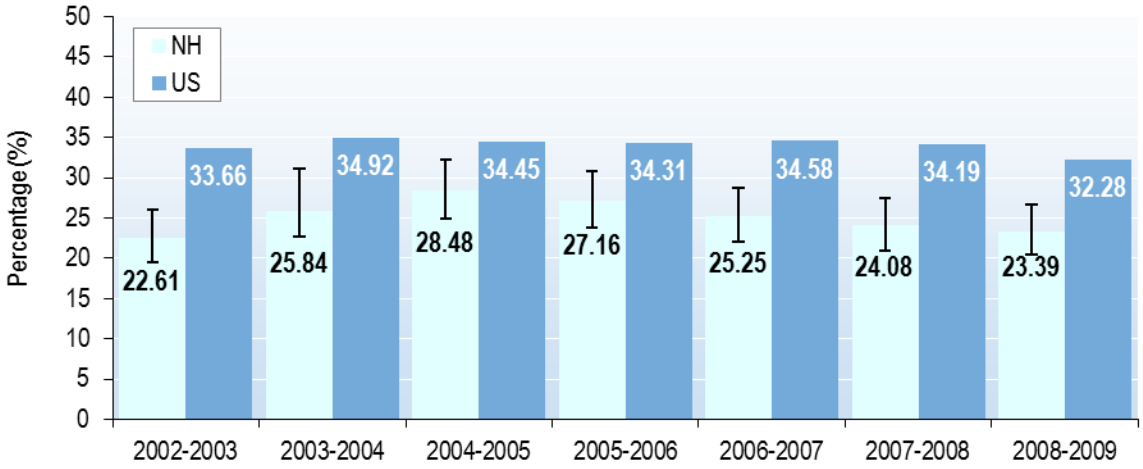
Perceptions of Great Risk of Smoking Marijuana Once a Month - Age 12+



Source: National Survey on Drug Use and Health

FIGURE 54

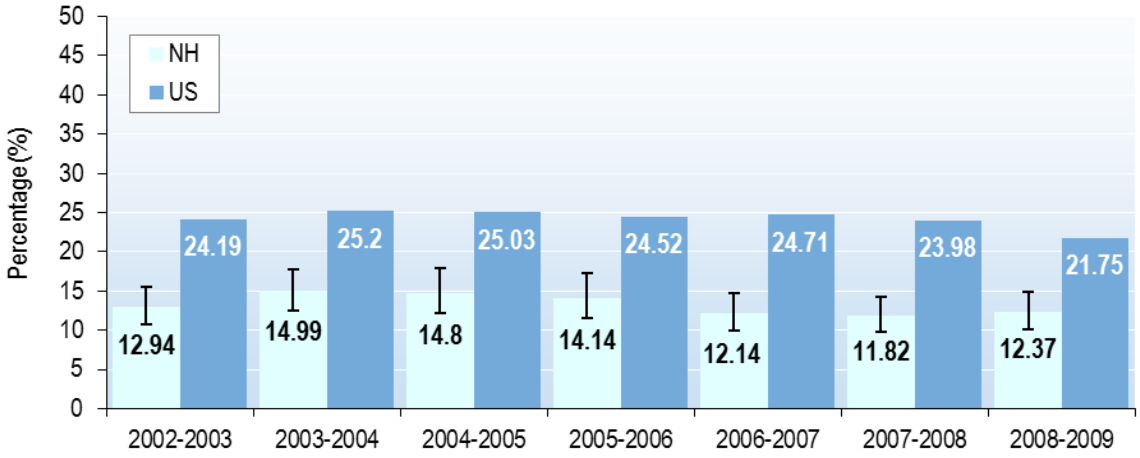
Perceptions of Great Risk of Smoking Marijuana Once a Month – Ages 12-17



Source: National Survey on Drug Use and Health

FIGURE 55

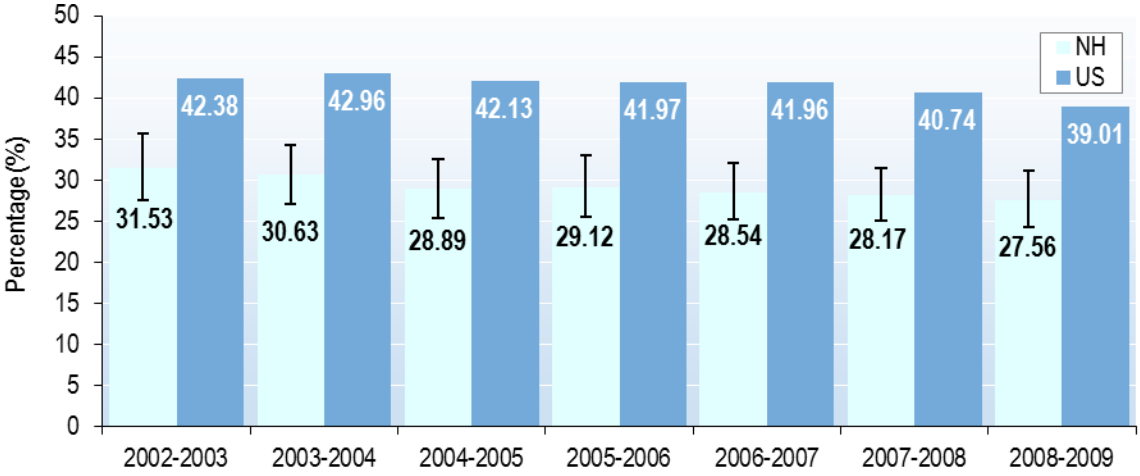
Perceptions of Great Risk of Smoking Marijuana Once a Month – Ages 18-25



Source: National Survey on Drug Use and Health

FIGURE 56

Perceptions of Great Risk of Smoking Marijuana Once a Month – Age 26+

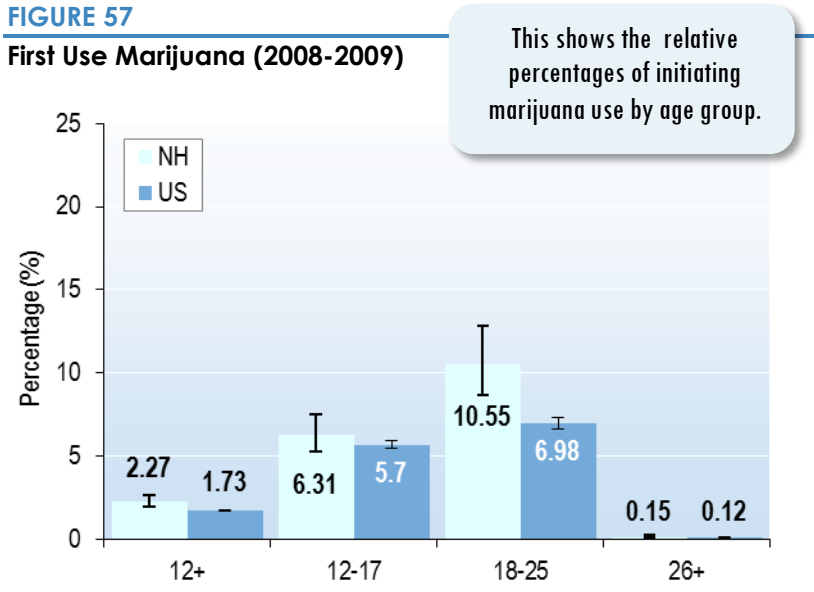


Source: National Survey on Drug Use and Health

Initiation of Marijuana Use

FIGURE 57

First Use Marijuana (2008-2009)



Source: National Survey on Drug Use and Health (2008-2009)

Since 2002, a significantly higher proportion of New Hampshire residents aged 12 + have reported initiating marijuana use compared with the nation. New Hampshire's higher initiation rates appear to be being driven by initiators in the 18-25 year old age group.

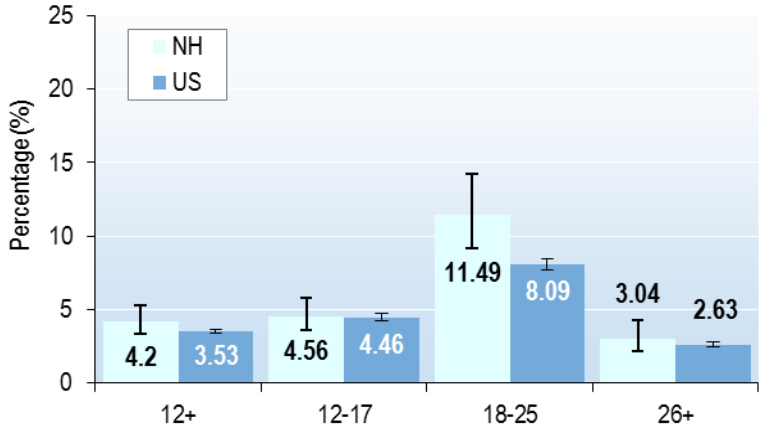
For every year since 2002-2003, including 2008- 2009, a significantly higher proportion of young adults aged 18-25 report having initiated marijuana use compared to the nation overall.

Use of Illicit Drugs Other Than Marijuana in New Hampshire

According to the 2008-2009 NSDUH, New Hampshire has a statistically significantly higher proportion of individuals aged 18- 25 reporting use of illicit drugs other than marijuana in the past month (11.49%), compared with the nation as a whole (8.09%). Use rates among members of other age groups are not significantly different than the nation as a whole.

FIGURE 58

Illicit Drug Use Other Than Marijuana in Past Month



In the 2008-2009 NSDUH survey, nearly 5% of 12-17 year olds reported illicit drug use other than marijuana in the past month. For the ages of 26 years and over, about 3% report using illicit drug other than marijuana in the past month.

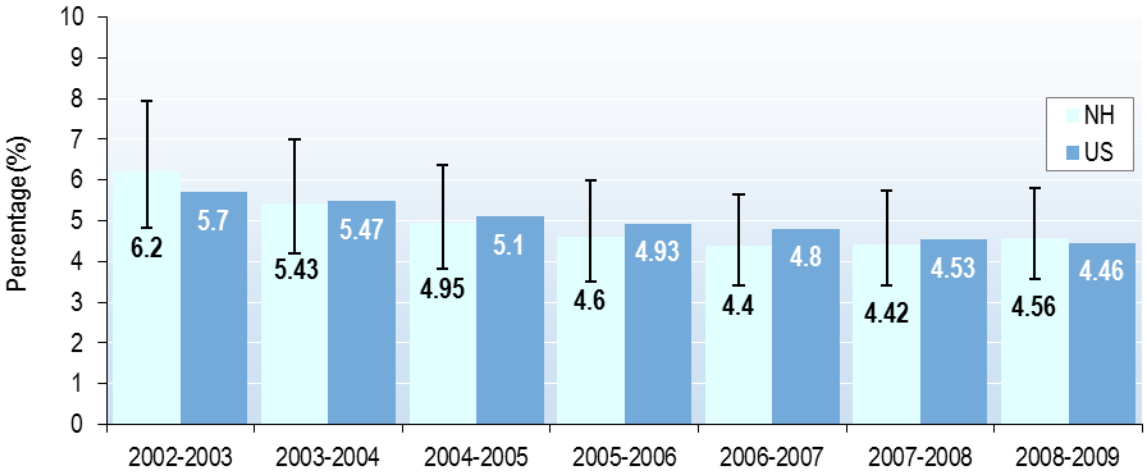
Source: National Survey on Drug Use and Health (2008-2009)

Use of Illicit Drugs Other Than Marijuana Among Youth in New Hampshire

Nationally, usage rates appear to have declined significantly (from 5.7% in 2002-2003 to 4.46% of individuals aged 12-17 in 2008-2009), although no confidence intervals are available for the 2002-2003 estimate.

FIGURE 59

Illicit Drug Use Other Than Marijuana in Past Month
Ages 12-17



Source: National Survey on Drug Use and Health

Looking regionally, there are no statistically significant differences between the proprotion of 12-17 year olds in New Hampshire, in the other New England states, or in the nation as a whole who reported using illicit drugs other than marijuana in the past year. There has been no statistically significant change in the proportion of New Hampshire youths aged 12-17 who reported past month use of illicit drugs other than marijuana use between 2002-2003 and 2008-2009.

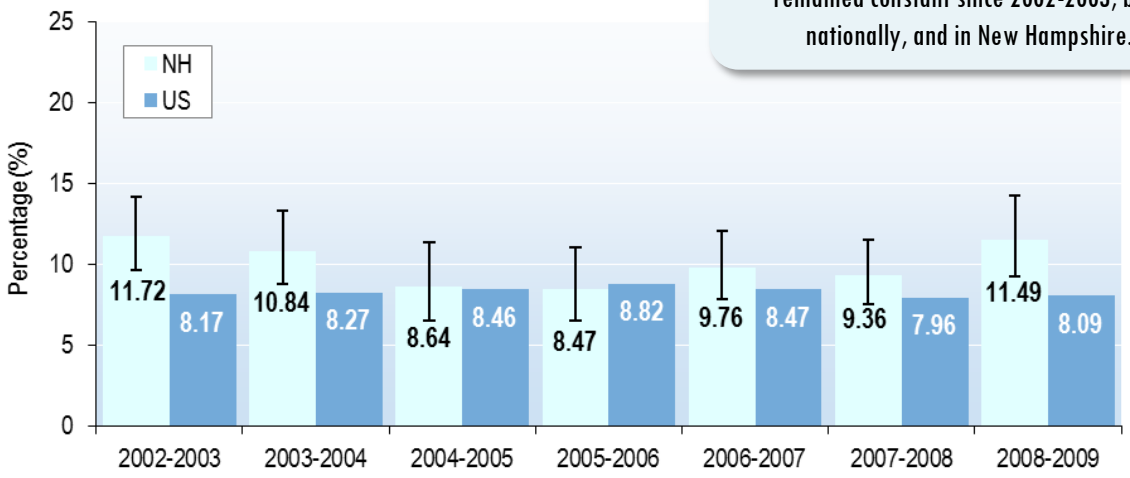
Use of Illicit Drugs Other Than Marijuana Among Young Adults in New Hampshire

Young adults aged 18-25 from New Hampshire, Rhode Island, and Vermont report statistically significantly higher rates of non-marijuana illicit drug use in the past month than young adults nationwide.

FIGURE 60

Illicit Drug Use Other Than Marijuana in Past Month
Ages 18-25

Usage rates for illicit drugs other than marijuana for individuals aged 18-25 have remained constant since 2002-2003, both nationally, and in New Hampshire.



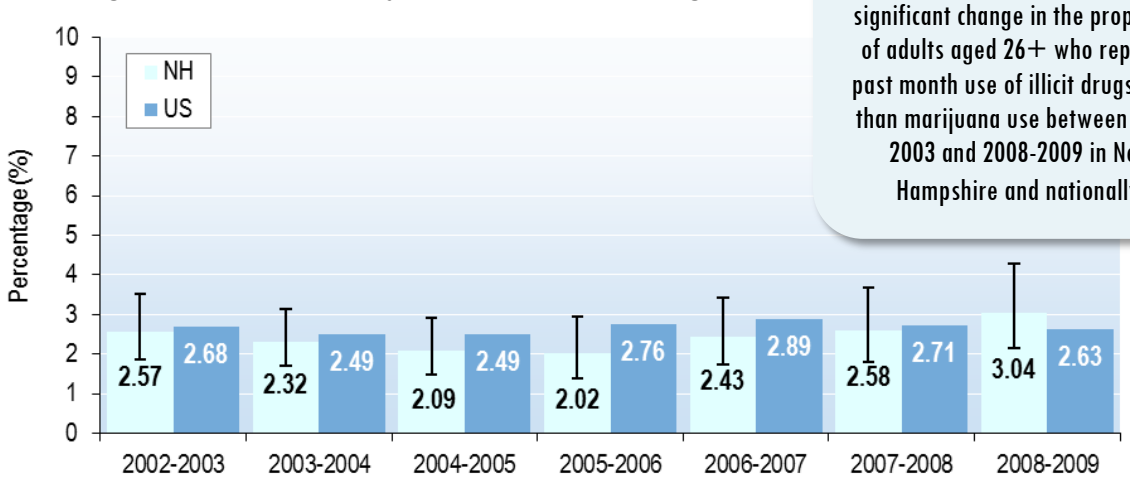
Source: National Survey on Drug Use and Health

Use of Illicit Drugs Other Than Marijuana Among Adults in New Hampshire

FIGURE 61

Illicit Drug Use Other Than Marijuana in Past Month - Age 26+

There has been no statistically significant change in the proportion of adults aged 26+ who reported past month use of illicit drugs other than marijuana use between 2002-2003 and 2008-2009 in New Hampshire and nationally.



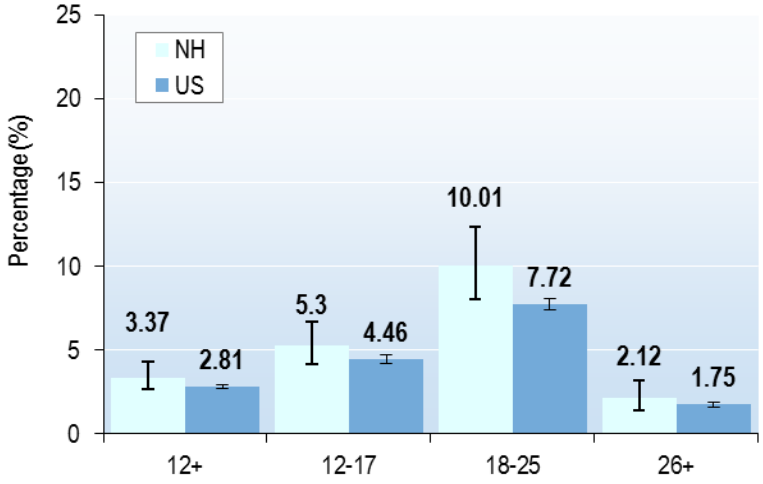
There are no statistically significant differences in the proportion of adults aged 26+ who reported using illicit drugs other than marijuana in the past month among the New England states. A higher proportion of adults aged 26+ from Rhode Island reported using illicit drugs other than marijuana in the past month than adults nationwide.

Dependence on & Abuse of Illicit Drugs Including Marijuana in New Hampshire

The National Survey on Drug Use and Health (NSDUH) includes a series of questions to assess the prevalence of illicit drug dependence on or abuse in the past 12 months.

FIGURE 62

Illicit Drug Dependence or Abuse in Past Year (2008-2009)



Source: National Survey on Drug Use and Health

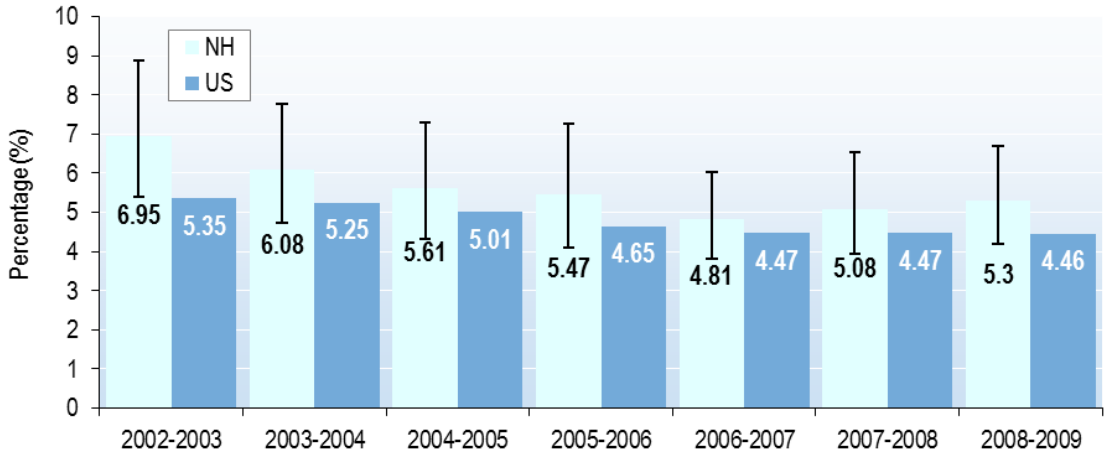
More than 5% of individuals aged 12-17 years and approximately 10% of those aged 18-25 reported dependence on or abuse of illicit drugs (including marijuana) in 2008-2009.

Comparing New Hampshire and the United States as a whole, there are no statistically significant differences in the rates of individuals reporting dependence on or abuse of illicit drugs (including marijuana) in the past year for any age group.

About 2% of adults age 26 and over reported dependence on or abuse of illicit drugs. Looking at trends since 2002-2003, there has been no significant change in reported dependency on or abuse of illicit drugs including marijuana in New Hampshire for any age group.

FIGURE 63

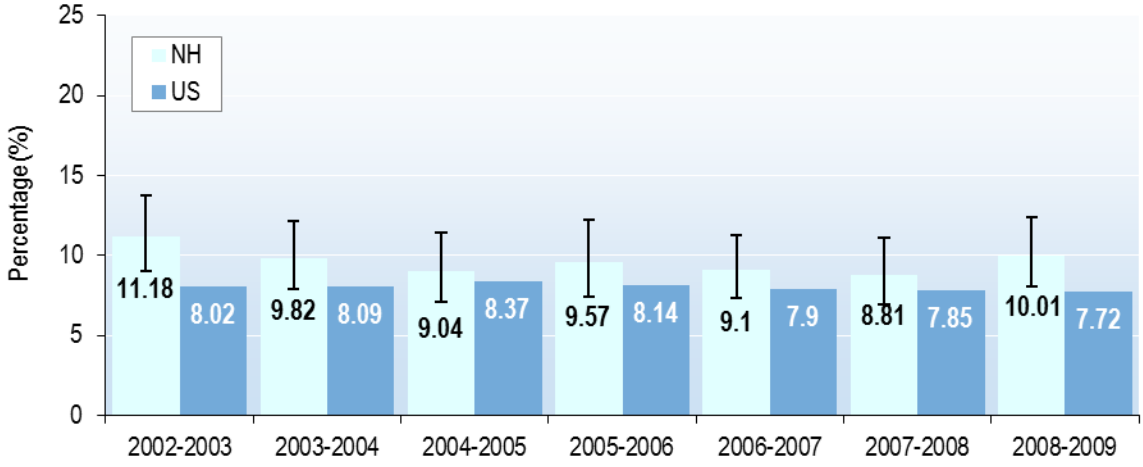
Illicit Drug Dependence or Abuse in Past Year - Ages 12-27



Source: National Survey on Drug Use and Health

FIGURE 64

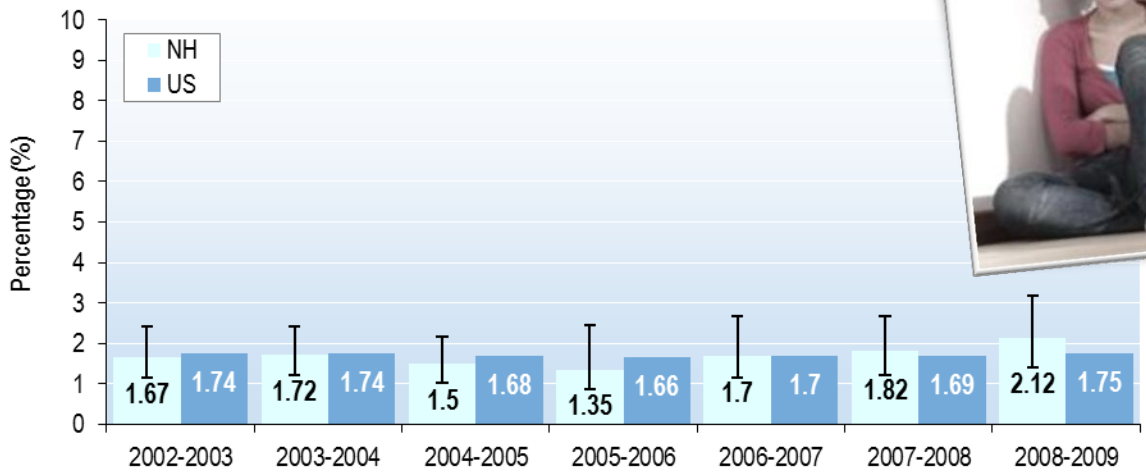
Illicit Drug Dependence or Abuse in Past Year - Ages 18-25



Source: National Survey on Drug Use and Health

FIGURE 65

Illicit Drug Dependence or Abuse in Past Year - Ages 26+



Source: National Survey on Drug Use and Health

Comparing illicit drug dependence and abuse rates regionally, there are no statistically significant differences in rates for any age group. Individuals aged 18-25 in Vermont and Rhode Island report higher rates of dependence on illicit drugs including marijuana than individuals in this age group nationally.

Unmet Treatment Need for Dependence or Abuse of Illicit Drugs Including Marijuana in New Hampshire

The NSDUH definition of a person needing but not receiving treatment for an illicit drug problem is that the person meets the criteria for abuse of or dependence on illicit drugs in the past year according to the DSM-IV, but did not receive specialty treatment for an illicit drug problem in the past year.

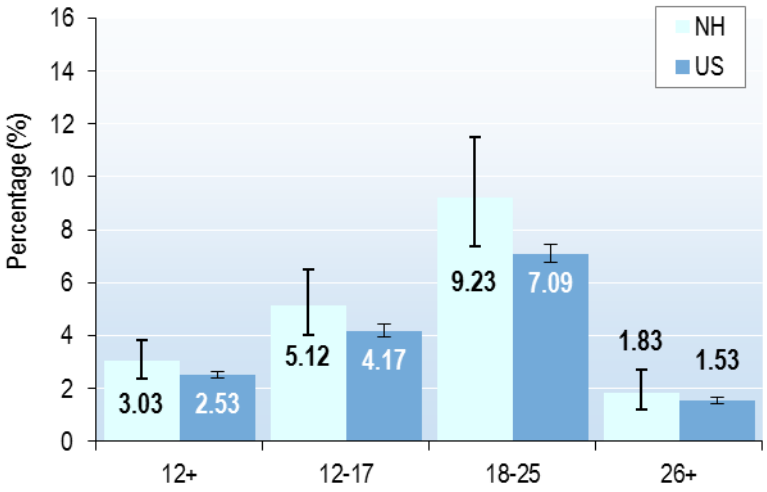
Comparing New Hampshire with the nation, there were no statistically significant differences in the proportion of individuals reporting that they needed but did not receive treatment for illicit drug use for any age group.

Specialty treatment is treatment received at a drug or alcohol rehabilitation facility (inpatient or outpatient), hospital (inpatient only), or mental health center. It does not include treatment at an emergency room, private doctor's office, self-help group, prison or jail, or hospital as an outpatient.

Source: *Substance Dependence, Abuse, and Treatment Need.* Office of Applied Studies. SAMHSA. Available at: http://oas.samhsa.gov/2k8state/Ch5.htm Downloaded 11/15/11.

FIGURE 66

Needing But Not Receiving Treatment for Illicit Drug Use in Past Year (2008-2009)



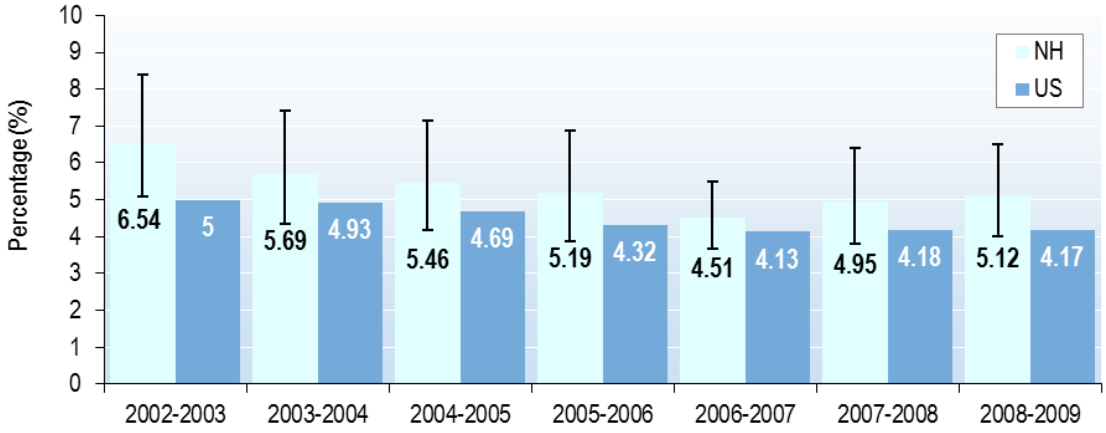
Source: National Survey on Drug Use and Health (2008-2009)

Looking at trends over time by age group, there have been no significant changes in the proportion of individuals needing but not receiving treatment for illicit drug use for any age group in NH.

There may be a statistically significant downward trends nationally for the 12-17 year age group, however, confidence intervals are not available for the estimates prior to 2008-2009.

FIGURE 67

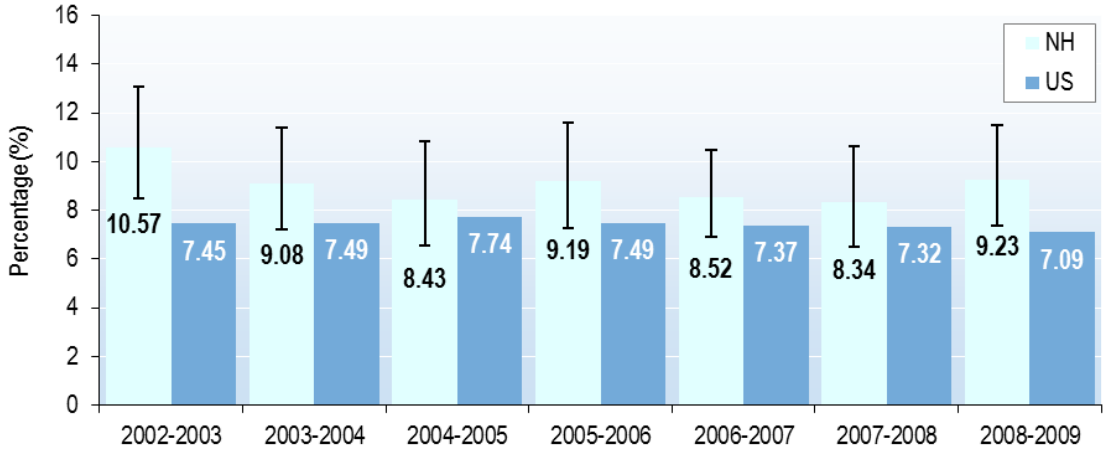
Needing But Not Receiving Treatment for Illicit Drug Use in Past Year - Ages 12-17



Source: National Survey on Drug Use and Health

FIGURE 68

Needing But Not Receiving Treatment for Illicit Drug Use in Past Year - Ages 18-25

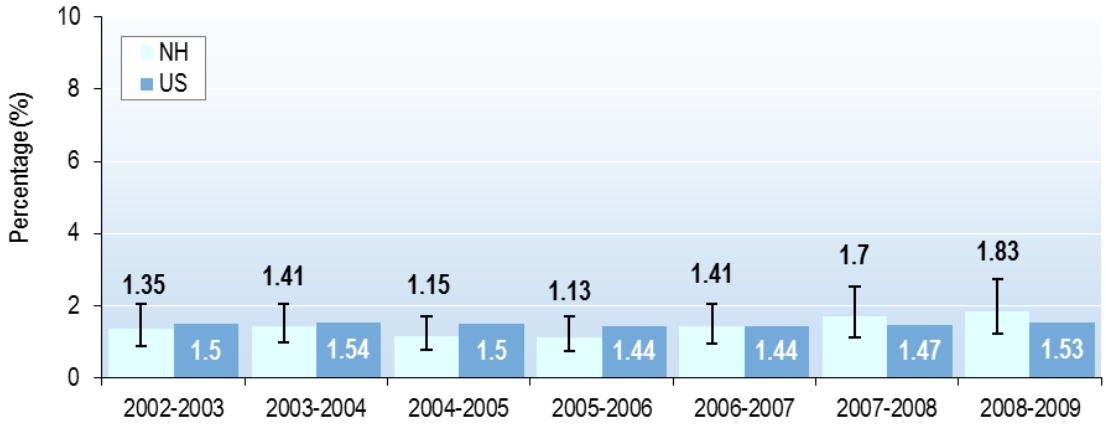


Source: National Survey on Drug Use and Health

Comparing the proportion of individuals needing but not receiving treatment for illicit drug use regionally, there are no statistically significant differences in rates for any age group between the New England states. Compared with national rates, a significantly higher proportion of individuals aged 18- 25 in Rhode report needing but not receiving treatment for illicit drug use.

FIGURE 69

Needing But Not Receiving Treatment for Illicit Drug Use in Past Year - Ages 26+



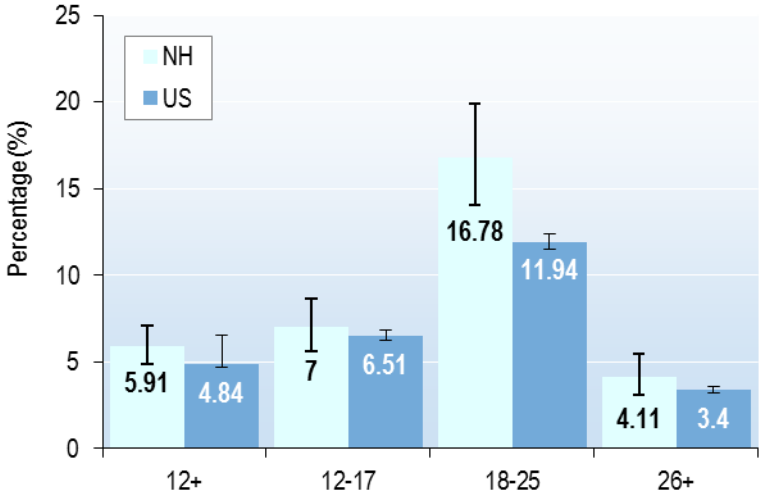
Source: National Survey on Drug Use and Health

Non-medical Use of Prescription & Over-the-Counter (OTC) Drugs in New Hampshire

Non-medical use of prescription and over-the counter drugs makes up an increasing component of total illicit drug abuse in New Hampshire. The NSDUH, the NH YRBS, and the BRFSS all include questions that address aspects of non-medical use of prescription and over-the counter drugs. The NSDUH includes a question about the non-medical use of pain relievers.[5]

FIGURE 70

Non-medical Use of Pain Relievers in Past Year (2008-2009)



Source: National Survey on Drug Use and Health (2008-2009)

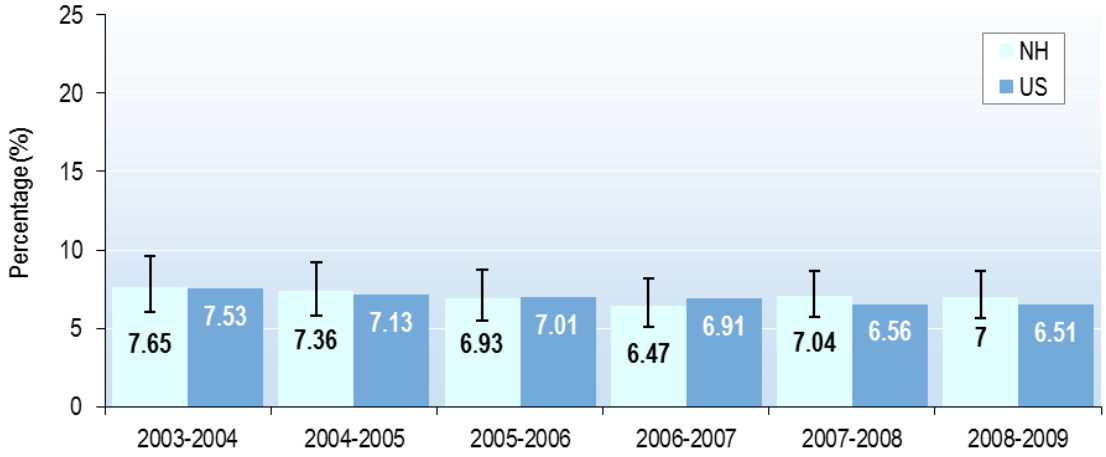
Results from 2008-2009 show that a statistically higher proportion of individuals 18- 25 (16.78%) in New Hampshire reported having used prescription pain relievers non-medically compared with the nation as a whole (11.94%).

Seven percent of New Hampshire 12-17 year olds and four percent of NH adults aged 26 and over reported having used prescription painkillers non-medically in 2008-2009.

[5] The NSDUH question asks about "use of any form of prescription pain relievers that were not prescribed for you or that you took only for the experience or feeling they caused".

FIGURE 71

Non-medical Use of Pain Relievers in Past Year - Ages 12-17

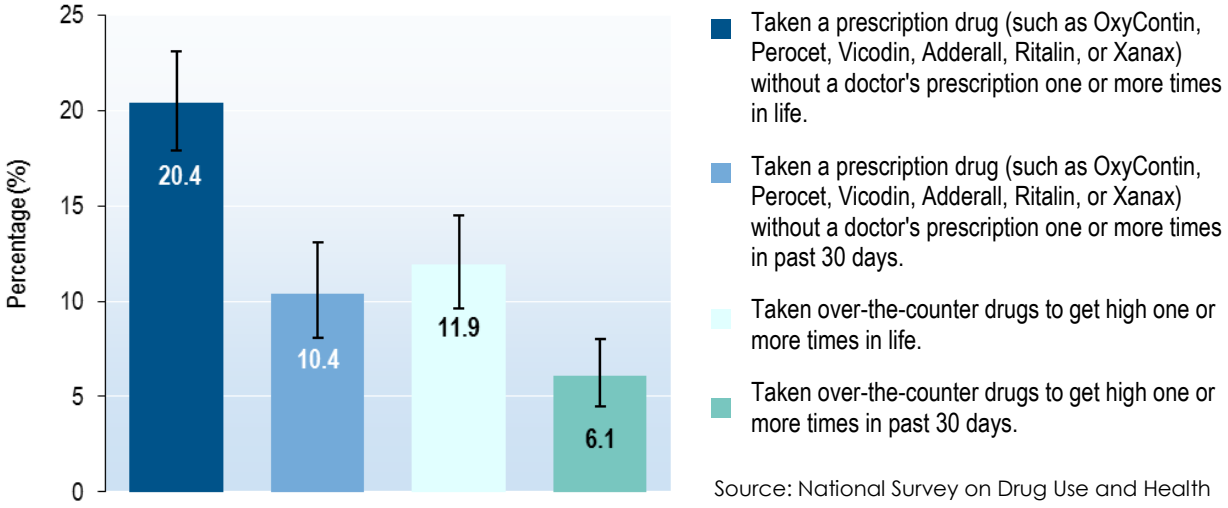


Source: National Survey on Drug Use and Health

In 2009, the NH YRBS began asking two questions regarding past 30 day, non-medical use of prescription and over the counter drugs.[6] In all, one in five (20.4%) of NH 9th- 12th graders reported having taken a prescription drug to get high in their lifetimes, and one in ten (10.4%) reported having done this in the last 30 days. Almost 12% (11.9%) of NH 9th-12th graders report lifetime use of over-the counter drugs to get high, and 6.1% reported having done so in the past 30 days. Because these questions were asked only in New Hampshire, no national comparisons are available.

FIGURE 72

Non-medical Use of Prescription & Over-the-Counter Drugs: NH 9th-10th Graders



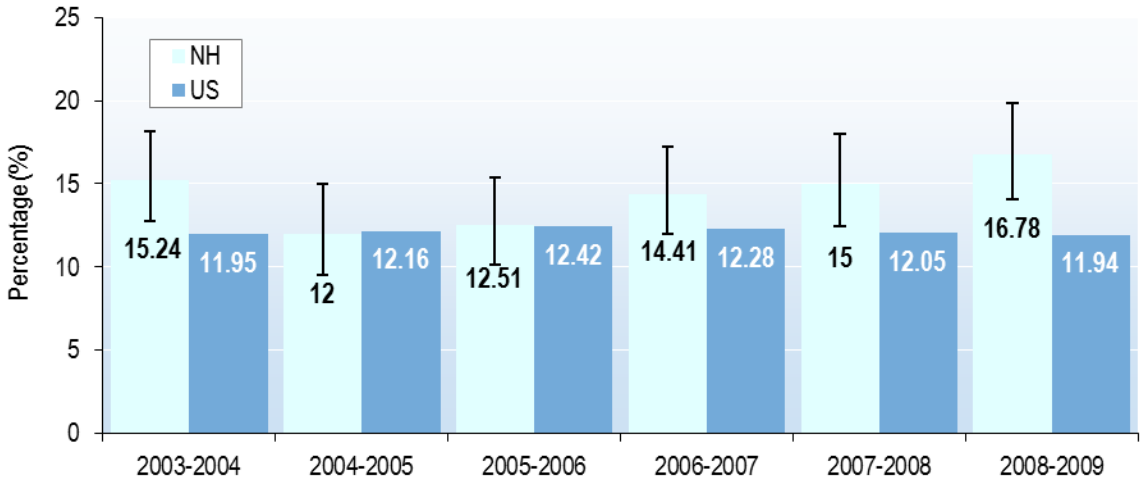
Source: National Survey on Drug Use and Health

[6] The NH YRBS questions are "During the past 30 days, how many times have you taken over-the-counter drugs to get high?"; and "During the past 30 days, how many times have you taken a prescription drug (such as OxyContin, Percocet, Vicodin, Adderall, Ritalin, or Xanax) without a doctor's prescription to get high?

Use rates among New Hampshire's 18- 25 year olds appear higher than the nation beginning in 2007-2008, although confidence intervals for the 2007-2008 national prevalence estimates are not available.

FIGURE 73

Non-medical Use of Pain Relievers in Past Year - Ages 18-25

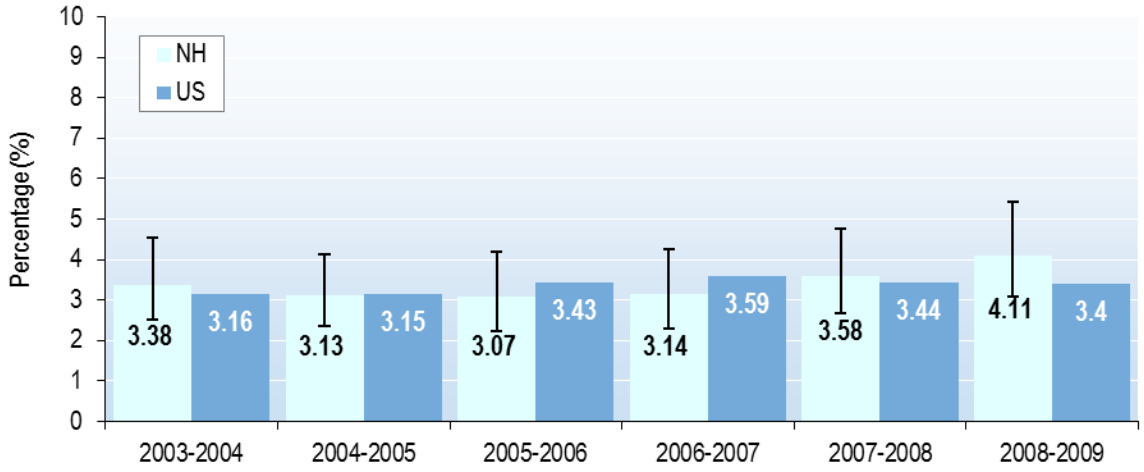


Source: National Survey on Drug Use and Health

Non-medical use of pain relievers for those aged 26 and over is not statistically different than United States averages since 2003-2004 and shows no New Hampshire trend.

FIGURE 74

Non-medical Use of Pain Relievers in Past Year - Ages 26+



Source: National Survey on Drug Use and Health

Consequences of Alcohol, Tobacco, and Other Drug Use

Consequences of alcohol, tobacco, and other drug use have important epidemiological considerations since the collateral consequences can pose immediate risk relative to morbidity and mortality. For example, binge drinking can pose immediate risk of harm in a fatal car crash due to the impairment of a motorist. Consequences of alcohol, tobacco, and other drug use also include significant cost burdens for the enforcement of laws to reduce harm and protect public safety.

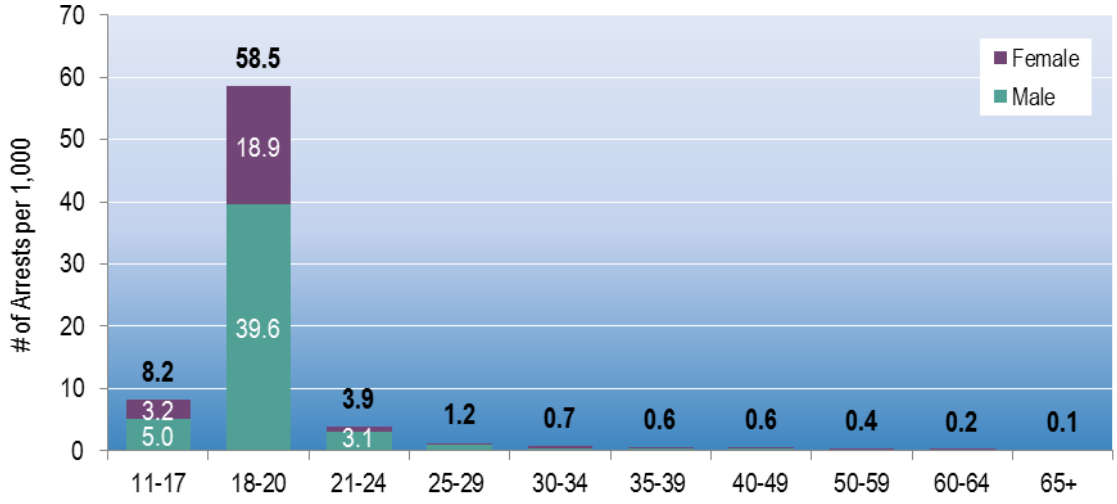
Crime

Crime and the enforcement of laws enacted for public safety impose societal costs. It is important to note that New Hampshire monitors and controls all alcohol sales through its Liquor Commission with both revenue and enforcement functions. The Liquor Commission oversees alcohol marketing with profits from the sale of alcohol going to the State of New Hampshire's general fund. The Commission also oversees 65 state liquor stores, while wine and beer are allowed to be sold by licensees at retail outlets such as grocery stores, gas stations, and restaurants. The enforcement bureau within the New Hampshire Liquor Commission is responsible for enforcing liquor laws and also supports enforcement through compliance checks and retailer/server trainings annually.

Arrest data from the 2008 National Incidence Based Reporting System[7] (NIBRS) data presented includes data from 148 local police departments and the New Hampshire State Police, representing 65.5% of law enforcement agencies. Data from NIBRS provided by the New Hampshire Department of Safety shows the greatest number of liquor law violations is committed by individuals aged 18 to 20 years. Males in this age group have double the number of liquor law violations as females of the same age.

Figure 75 **CRIME**

Per Capita 2008 Crime Data – Liquor Law Violations



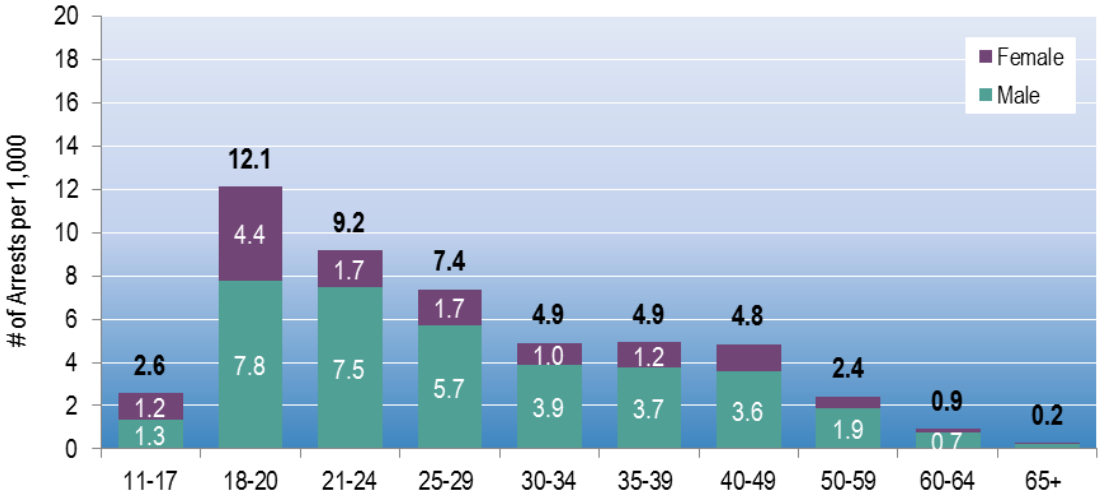
Source: Karen Lamb, NH Department of Safety: Per Capita 2008 Crime Data – Liquor Law Violations (90G)
2008 National Incidence Based Reporting System (NIBRS)

[7] Codes and Definitions for NIBRS can be found at http://www.fbi.gov/ucr/nibrs/manuals/v1all.pdf.

Arrests for public drunkenness are highest among males in each age group. The highest number of arrests per 1,000 population are for individuals ages 18 to 24, with male arrests higher than female. Female arrests are highest in the 18 to 20 year age group.

Figure 76 **CRIME**

Per Capita 2008 Crime Data – Drunkenness

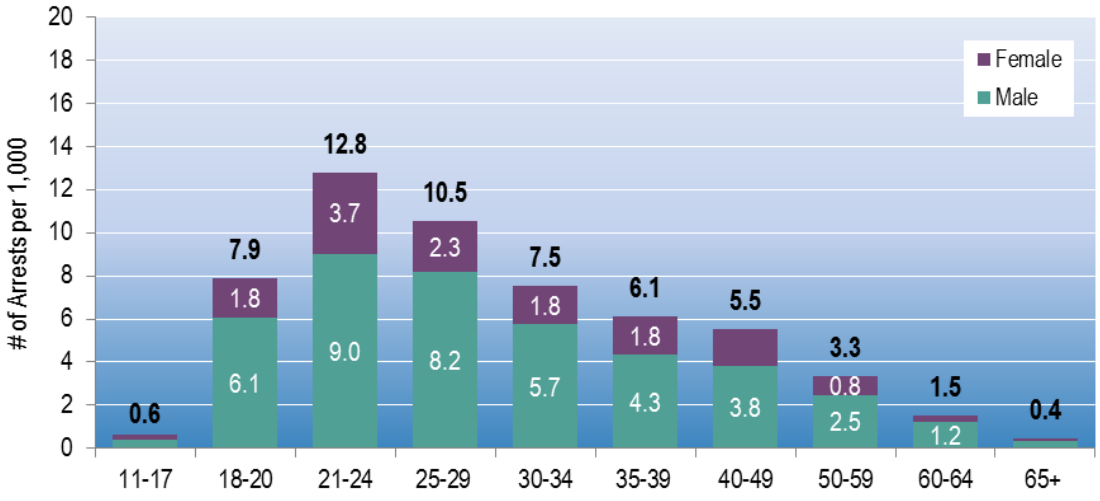


Source: Karen Lamb, NH Department of Safety: Per Capita 2008 Crime Data – Drunkenness (90E)
2008 National Incidence Based Reporting System (NIBRS)

NIBRS data indicate that the New Hampshire residents aged 21 to 24 had the highest arrest rate (12.8 arrests per 1,000 population) for Driving Under the Influence (DUI) violations in 2008. Individuals aged 25 to 29 were nearly as high with 10.5 arrests per 1,000 population. NIBRS reports that male DUI arrest rates were higher than females in every age range.

Figure 77 **CRIME**

Per Capita 2008 Crime Data – Driving Under the Influence

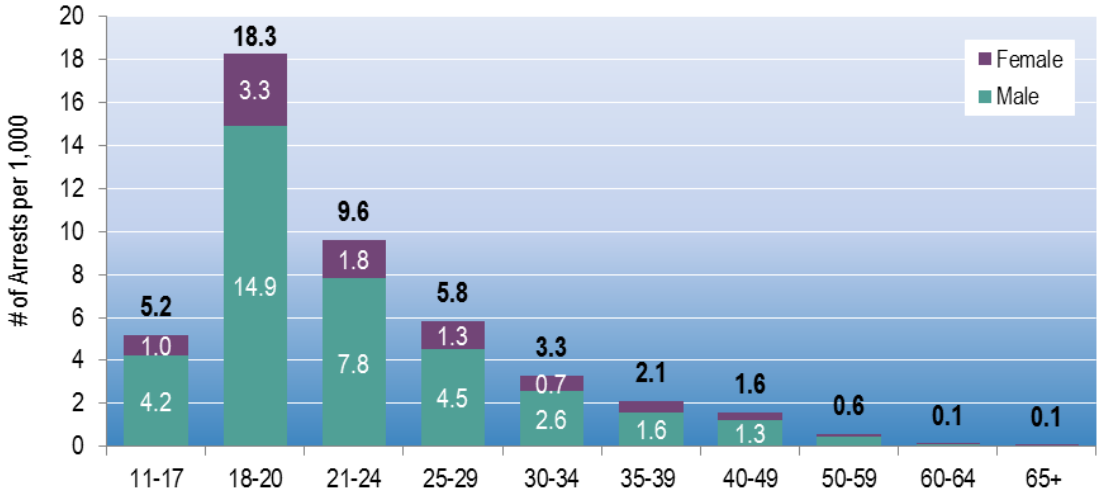


Source: Karen Lamb, NH Department of Safety: Per Capita 2008 Crime Data – Driving Under the Influence (90D)
2008 National Incidence Based Reporting System (NIBRS)

Arrests for drug and narcotic violations are most prevalent in the 18 to 20 year old category, with an arrest rate of 18.3 per 1,000 population in 2008. NIBRS data report higher arrest rates for males in each age range.

Figure 78 **CRIME**

Per Capita 2008 Crime Data – Drug/Narcotic Violations

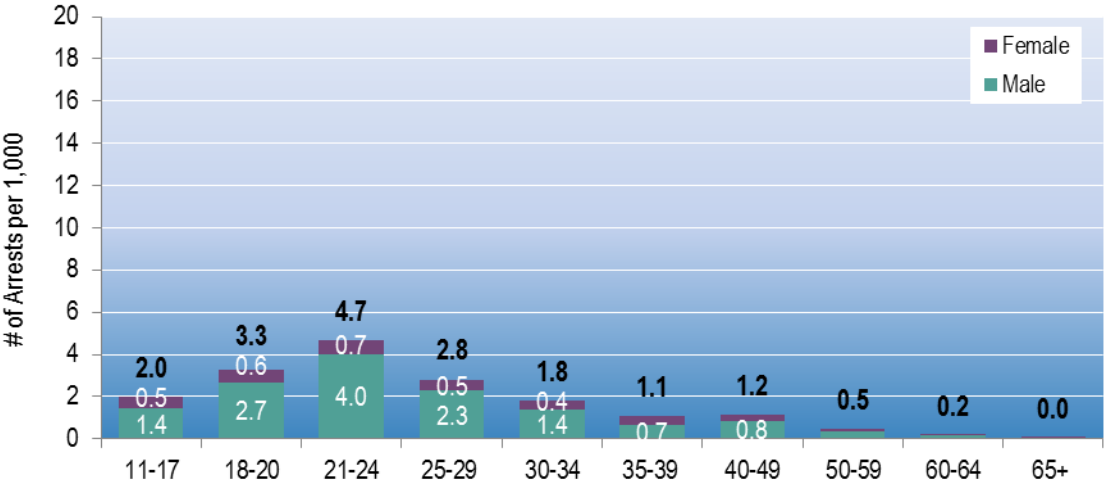


Source: Karen Lamb, NH Department of Safety: Per Capita 2008 Crime Data – Drug/Narcotic Violations (35A)
2008 National Incidence Based Reporting System (NIBRS)

Other behaviors often associated with substance use that lead to arrest are disorderly conduct, vandalism/property damage, and simple assault. These indicators follow similar patterns in terms of highest arrest rates among 18 to 20 or 21 to 24 year old males and lower arrest rates among females in each age range.

Figure 79 **CRIME**

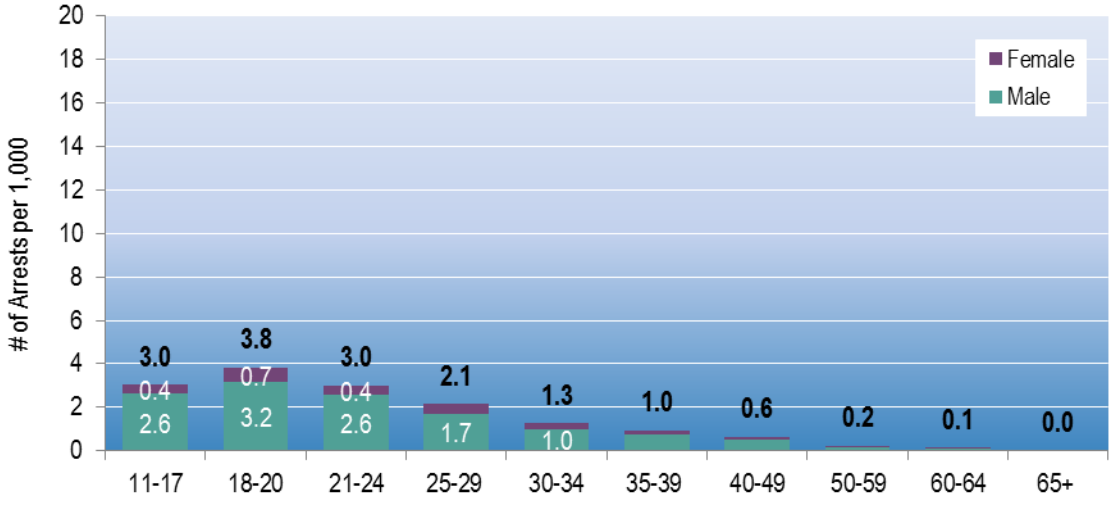
Per Capita 2008 Crime Data – Disorderly Conduct



Source: Karen Lamb, NH Department of Safety: Per Capita 2008 Crime Data – Disorderly Conduct (90C)
2008 National Incidence Based Reporting System (NIBRS)

Figure 80 **CRIME**

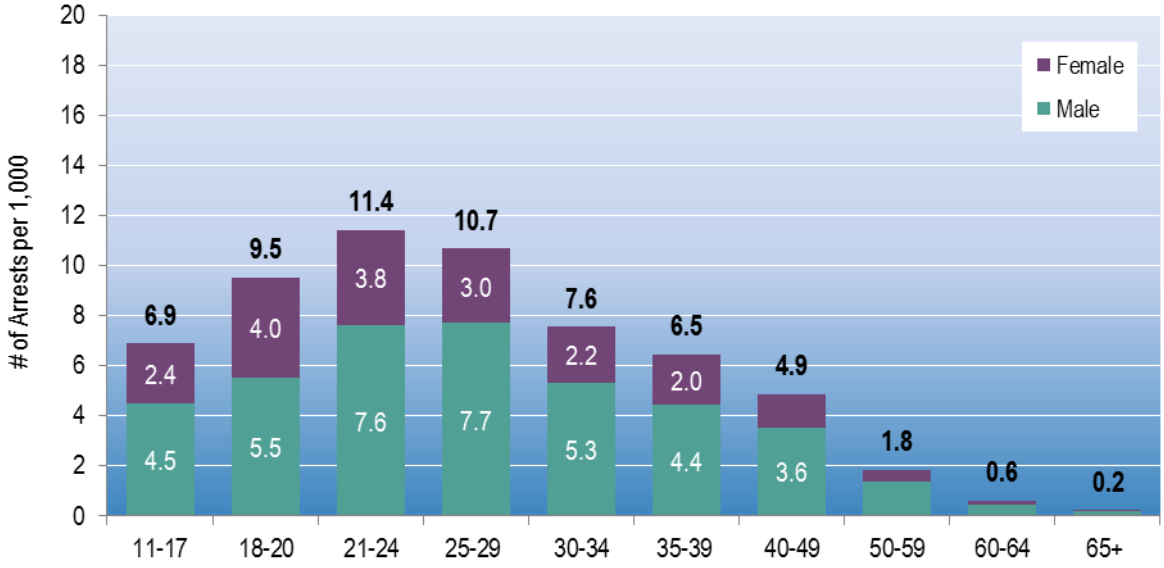
Per Capita 2008 Crime Data – Destruction/Damage/Vandalism of Property



Source: Karen Lamb, NH Department of Safety: Per Capita 2008 Crime Data –Destruction/Damage/Vandalism of Property (290) 2008 National Incidence Based Reporting System (NIBRS)

Figure 81 **CRIME**

Per Capita 2008 Crime Data – Simple Assault



Source: Karen Lamb, NH Department of Safety: Per Capita 2008 Crime Data – Simple Assault (13B) 2008 National Incidence Based Reporting System (NIBRS)

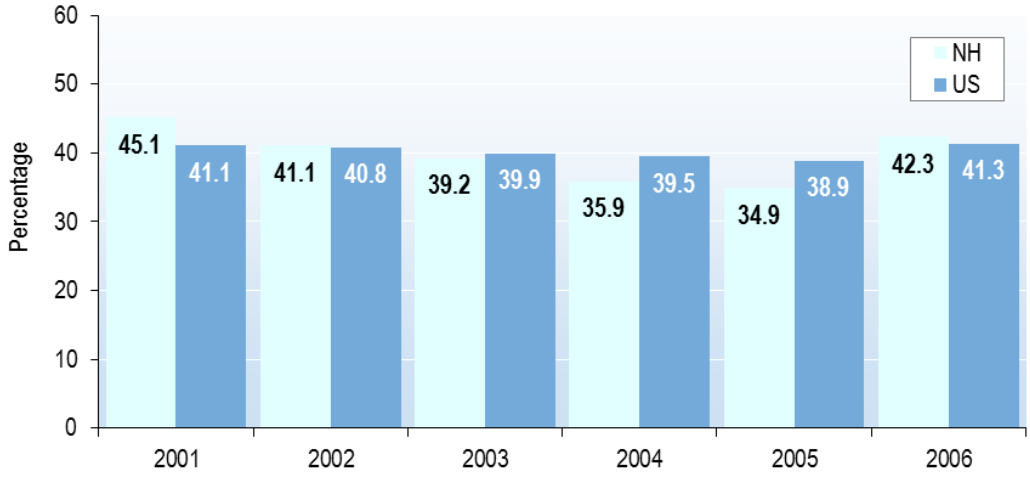
FATALITIES

Data sources on fatalities as a result of alcohol, tobacco or drug abuse include the Fatal Accident Reporting System (FARS) which reports data on traffic deaths; data from the New Hampshire Medical Examiner's Office which provides detail into methods and means of death, including drug overdose; data on Emergency Room fatalities from the NH HealthWRQS system, and death certificate data from the National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS).

Between 1/3 and 1/2 of motor vehicle crashes are related to alcohol consumption in the time period between 2001 and 2006. Trends may not be inferred since confidence intervals were not available for this data.

Figure 82 **FATALITIES - ALCOHOL**

Percentage of Fatal Motor Vehicle Crashes Involving Alcohol (2001-2006)

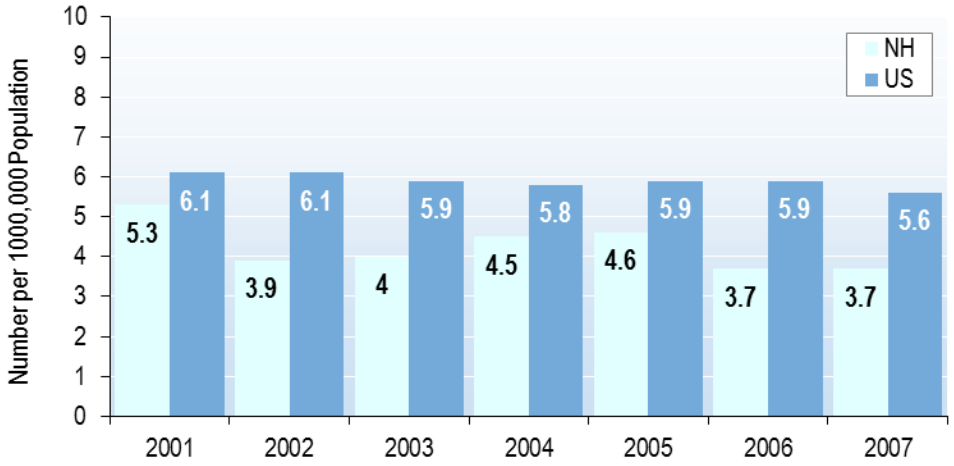


Source: Behavioral Health Indicator System

The rate of deaths per 100,000 population sustained in such motor vehicle crashes resulting from alcohol involvement are presented below. New Hampshire's alcohol-related motor vehicle deaths appear to be below the national average, however, without confidence intervals this cannot be confirmed.

Figure 83 **FATALITIES - ALCOHOL**

Deaths Sustained in Vehicle Crashes Involving Alcohol per 100,000 Population: 2001-2007



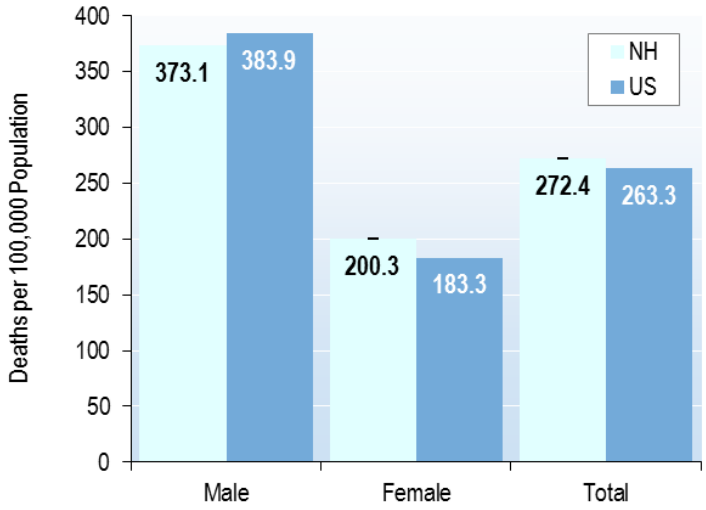
Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS), 2001–2007.

Tobacco use is the leading preventable cause of death in the United States.[8] Tobacco fatalities are represented by Estimated Smoking-Attributable Mortality (SAM) calculated by Smoking attributable mortality, morbidity, and economic costs (SAMMEC). Adult and Maternal and Child Health SAMMEC calculate the number of deaths for 23 adult and infant disease categories that contain diagnoses that are causally related to smoking (USDHHS, 2004). These diseases are categorized according to diagnosis codes found in the 10th revision of the International Classification of Disease (ICD 9-10). Confidence intervals were not available, however, New Hampshire patterns appear to be similar to national patterns by gender and for total estimated deaths.

[8] CDC. Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs—United States, 1995–1999. Morbidity and Mortality Weekly Report [serial online]. 2002;51(14):300–303 [Accessed 2011 Dec 2].

Figure 84 **FATALITIES - TOBACCO**

Estimated Smoking-Attributable Mortality (SAM) per 100,000 population, United States 2000-2004



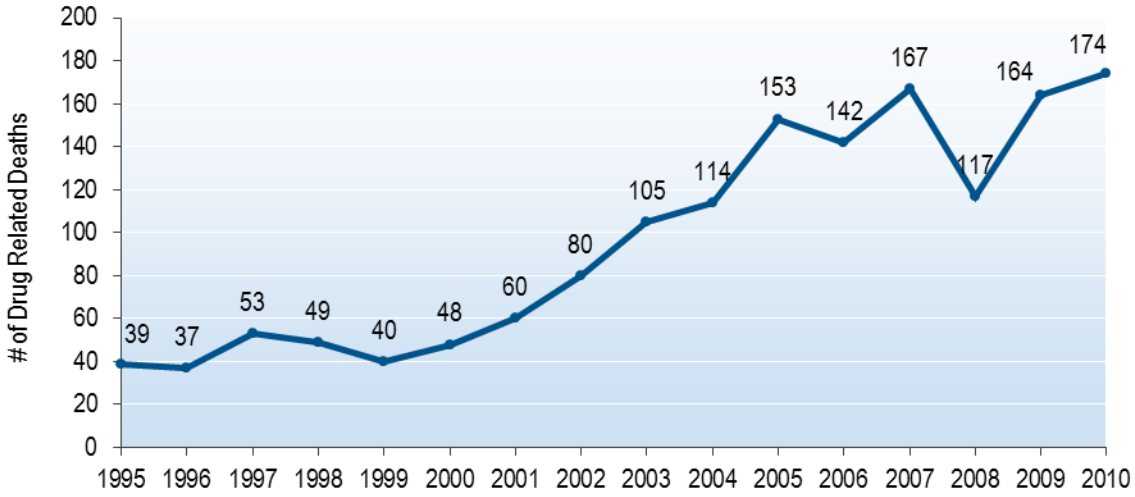
Source: MMW Report. Center for Disease Control and Prevention. January 23, 2009 / 58(02); 29-33

The following figures were developed by the New Hampshire Medical Examiner's Office to support state level dialogue and planning to address illicit drug and prescription drug abuse.

As shown below, the number of drug related deaths in New Hampshire has increased ten of the last fifteen years, with the number of drug related deaths more than tripling since 2000[9].

Figure 85 **FATALITIES – DRUG ABUSE**

Number of Drug Related Deaths: 1995-2010



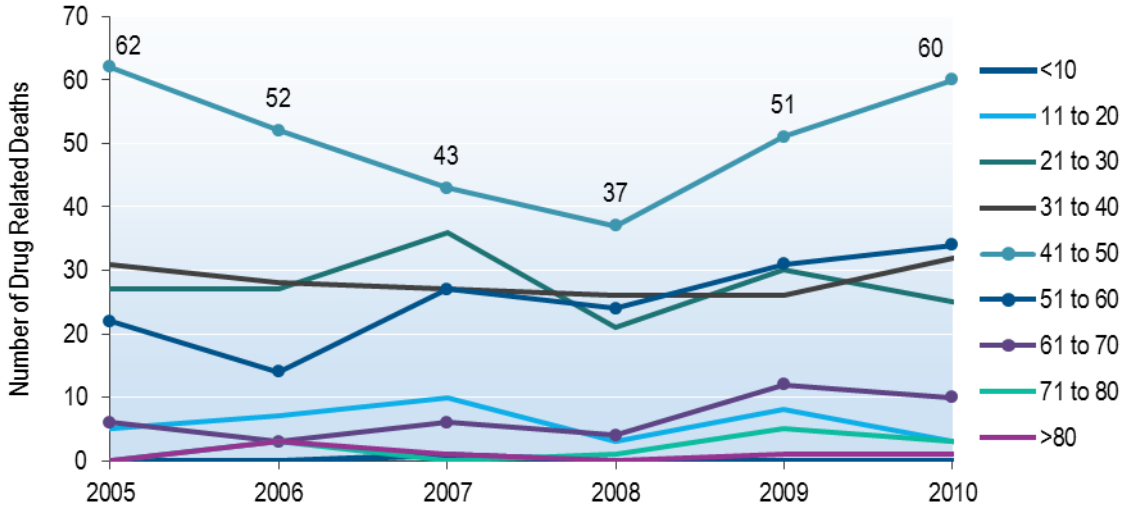
Source: Dr. Andrew, NH Medical Examiner's Office

[9] Statistical significance determined by plotting on Shewart's Control Charts. See methods in attachment ##.

Data on the age of individuals who have died as a result of drug use or abuse show that adults between the ages of 41 and 50 had a higher incidence of drug-related death than other age groups between 2005 and 2010.

Figure 86 **FATALITIES – DRUG ABUSE**

Drug Deaths 2005-2010 By Age

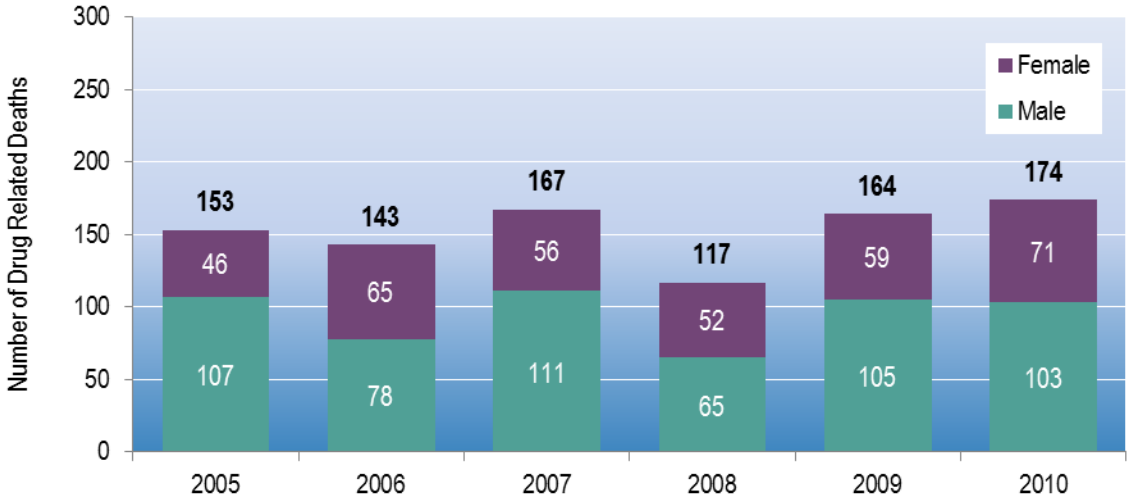


Source: Behavioral Health Indicator System

More males than females died of drug-related deaths in New Hampshire between 2005 and 2010. There are no trends over time by gender.

Figure 87 **FATALITIES – DRUG ABUSE**

Drug Deaths 2005-2010 By Gender



Source: Dr. Andrew, NH Medical Examiner's Office

By addressing the increases reported in prescription drug abuse, the New Hampshire Attorney General's office has brought new attention to the accessibility of these drugs. Data from the New Hampshire Medical Examiner's Office shows the source of drugs involved in overdose deaths. According to this data, the number of deaths involving overdoses of prescribed drugs has almost doubled between 2008 and 2009.

Figure 88

Source of Drug

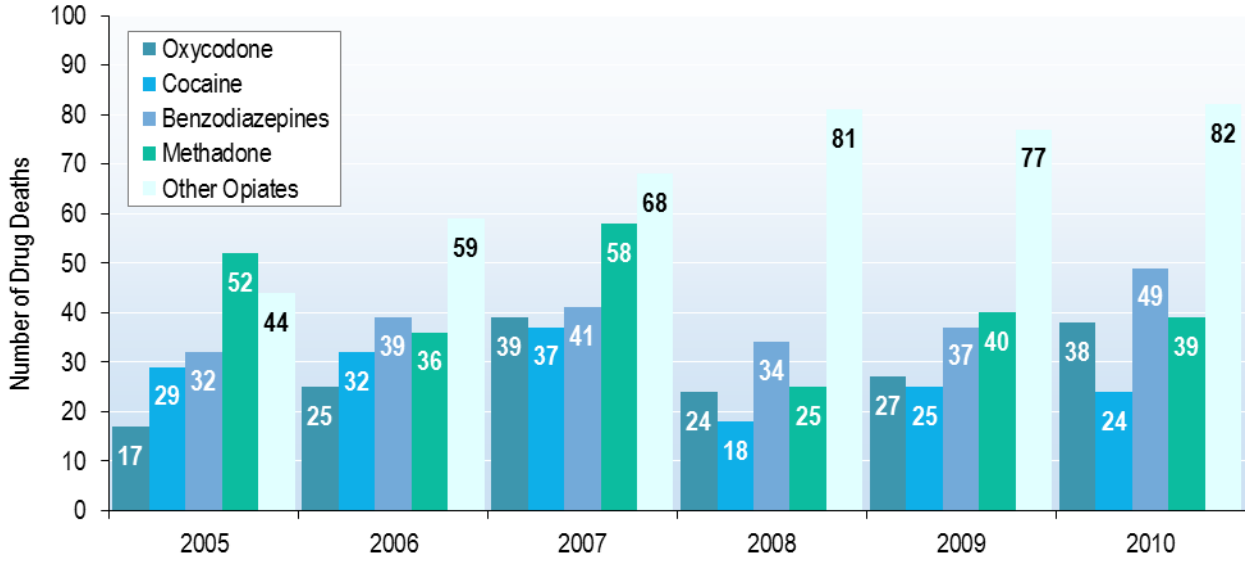
SOURCE	2008	2009
Prescribed	48	83
Illicitly obtained	45	63
Illicit/prescribed	12	6
Over-the-counter	4	4
OTC/prescribed	3	3
Undetermined	3	1

The New Hampshire Medical Examiner's Office provided data relative to the specific drugs present in overdose deaths. Between 2005 and 2010 there appears to be an increase in the presence of benzodiazepines and opiate overdoses leading to death.

Source: Dr. Andrew, NH Medical Examiner's Office

Figure 89 FATALITIES – DRUG ABUSE

Leading Agents in New Hampshire Drug Deaths

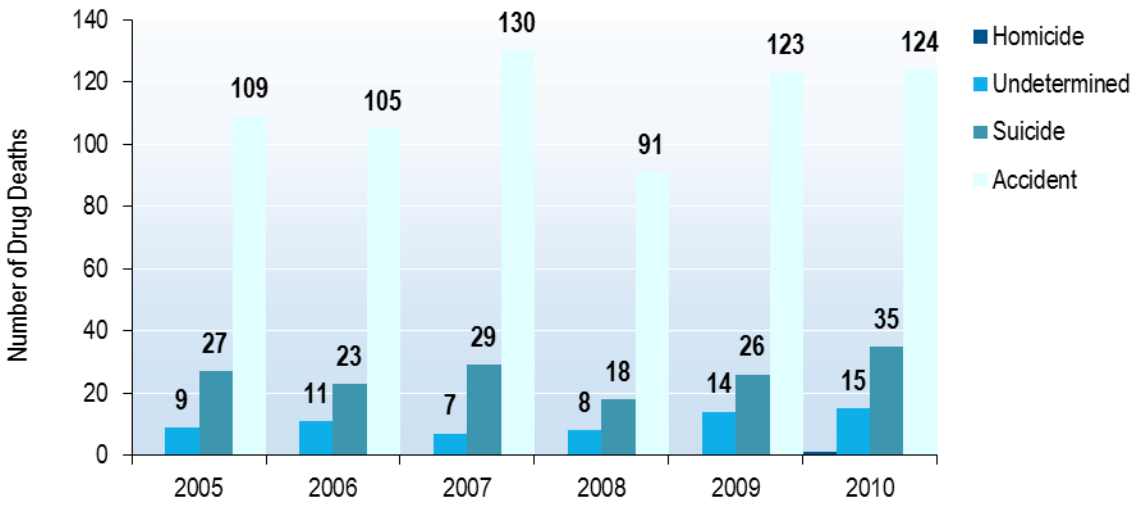


Source: Dr. Andrew, NH Medical Examiner's Office

The chart below indicates that the majority of drug overdose deaths in New Hampshire are accidental followed by suicide. It is important to note that undetermined and accidental overdoses are relatively subjective categorizations based on the lack of evidence of intentional overdose. Therefore, intentional overdoses, or suicides, may be higher than the data demonstrates.

Figure 90 FATALITIES – DRUG ABUSE

Drug Deaths by Manner 2005-2010

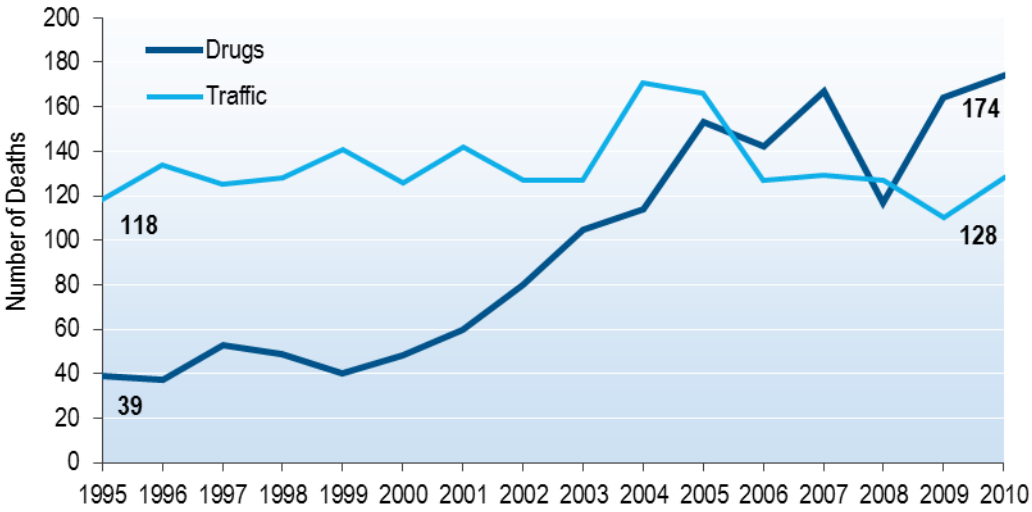


Source: Dr. Andrew, NH Medical Examiner's Office

Below is a graph showing New Hampshire drug deaths as compared to traffic deaths from 1995 to 2010. Drug deaths appear to have caught up to traffic deaths and potentially surpassed them in recent years.

Figure 91 FATALITIES – DRUG ABUSE

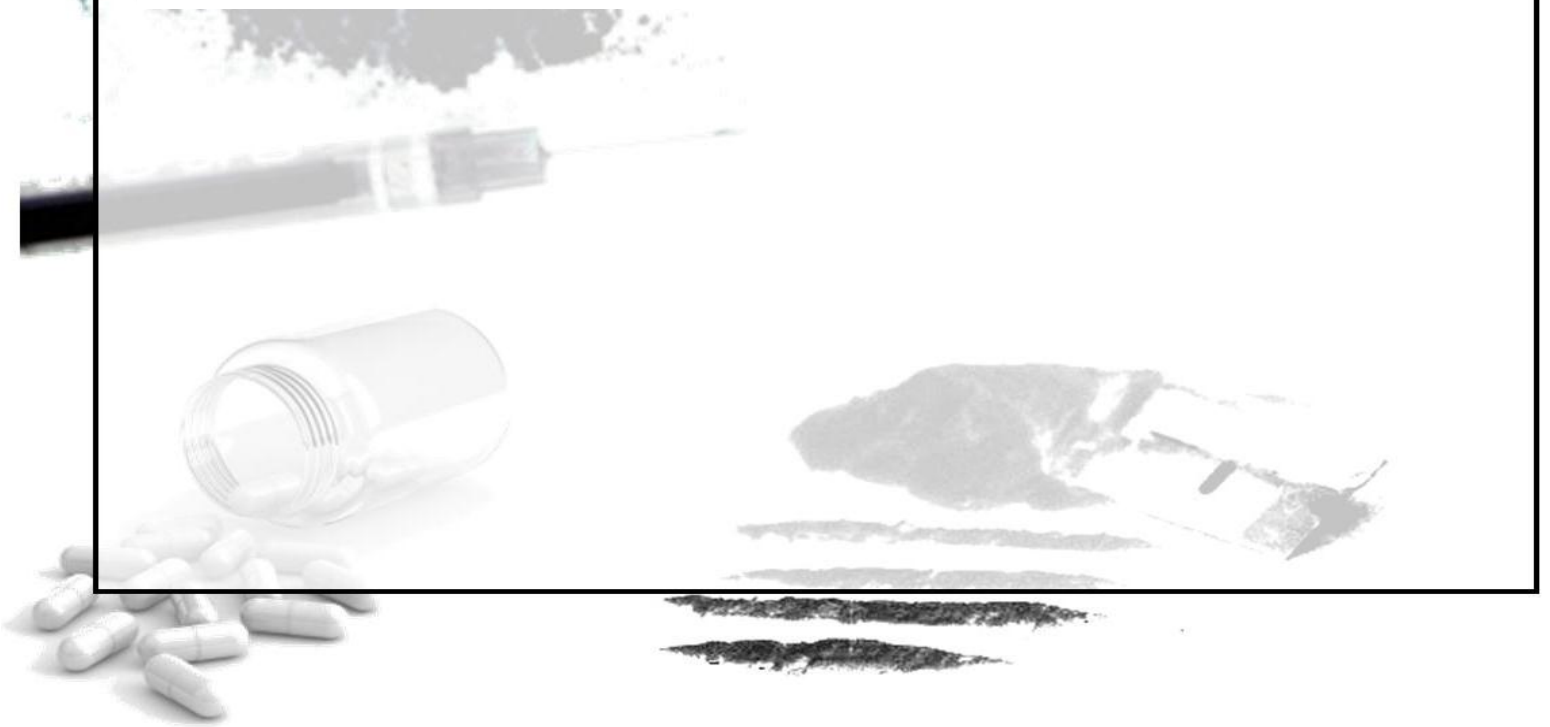
New Hampshire Drug Deaths v Traffic Deaths 1995-2010



Source: Dr. Andrew, NH Medical Examiner's Office

Figure 92: New Hampshire Top Ten Drugs Involved in Death 2004 – 2010

2004	2005	2006	2007	2008	2009	2010
Methadone	Methadone	Methadone	Methadone	Methadone	Methadone	Methadone
Cocaine	Cocaine	Cocaine	Cocaine	Oxycodone	Oxycodone	Oxycodone
Oxycodone	Oxycodone	Oxycodone	Oxycodone	Cocaine	Cocaine	Cocaine
"Heroin"	Diazepam	Diazepam	Diazepam	"Heroin"	"Heroin"	Morphine
Fentanyl	"Heroin"	Fentanyl	Morphine	Diazepam	Citalopram	Fentanyl
Diazepam	Quetiapine	Venlafaxine	Fentanyl	Morphine	Morphine	Diazepam
Hydrocodone	Hydrocodone	"Heroin"	"Heroin"	Fentanyl	Alprazolam	"Heroin"
Alprazolam	Citalopram	Clonazepam	Alprazolam	Alprazolam	Fentanyl	Hydrocodone
Quetiapine	Fentanyl	Acetaminophen	Tramadol	Hydrocodone	Clonazepam	Clonazepam
Amitriptyline	Alprazolam	Alprazolam	Hydrocodone	Citalopram	Diazepam	Amitriptyline

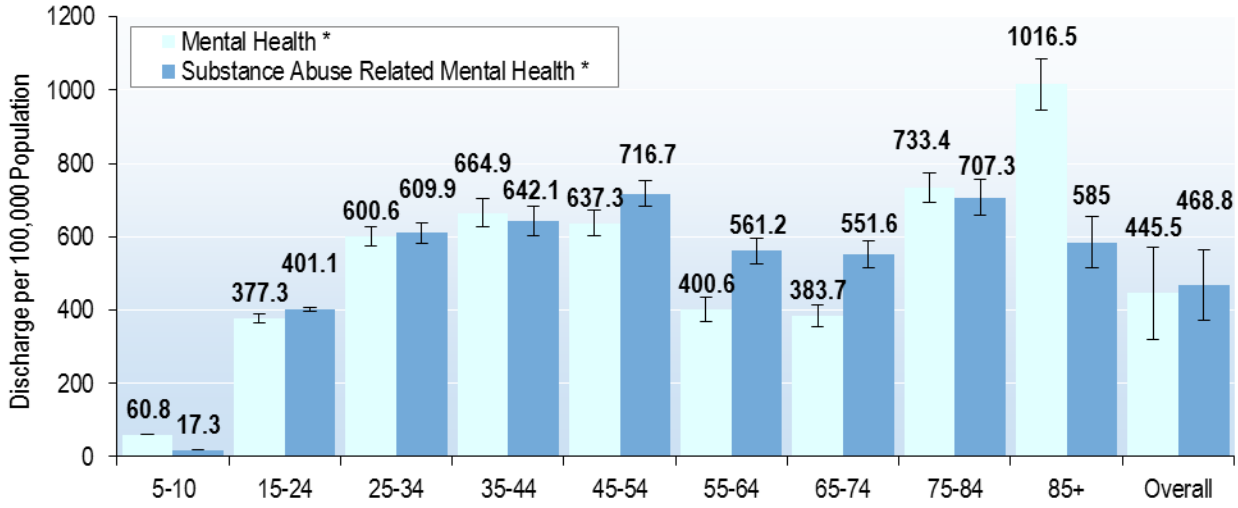


Hospital Discharges

In a review of hospital discharge data from the NH HealthWRQS, the substance abuse and mental health discharge rates are comparable across age ranges with the exception of adults from 55 to 74 where substance abuse discharge rates are statistically significantly higher than discharges for mental health conditions. The highest rates of discharges for mental health conditions are for persons over 75. It should be noted that the mental health diagnosis codes (ICD-9) also include dementia which likely accounts for some of this variation.

Figure 93 HOSPITAL DISCHARGES

Inpatient Mental Health and Substance Use Discharges per 100,000 for NH (2007)



Source: NH DHHS Hospital Discharge Data Collection System.

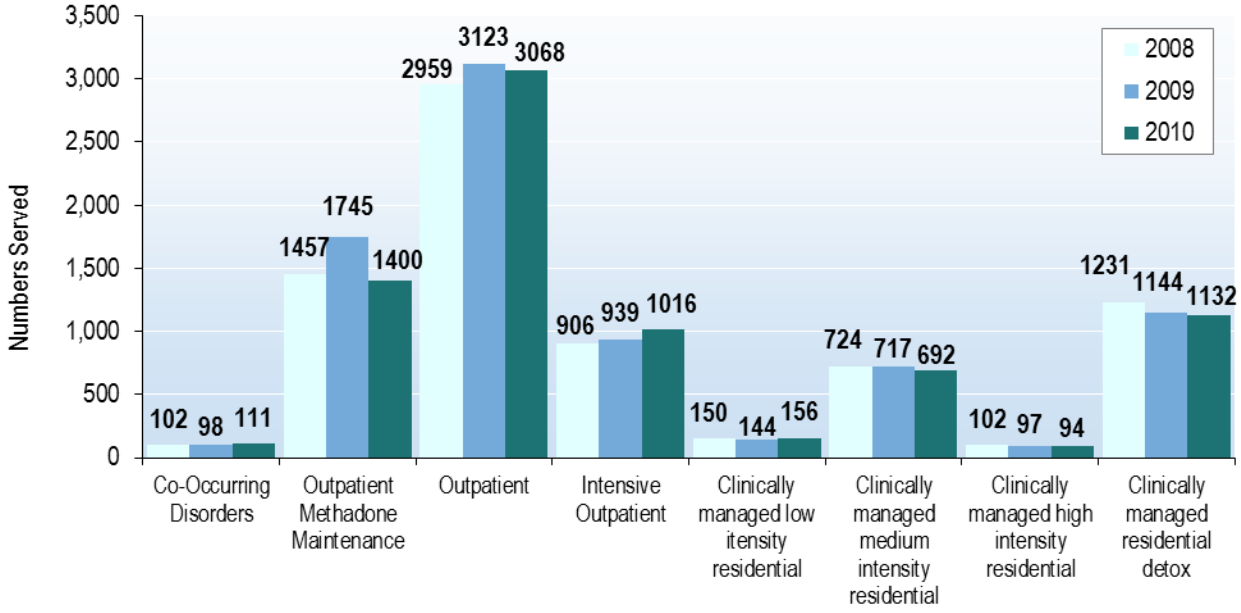
*Indicator Definition: Inpatient discharges with a principal diagnosis of a mental health disorder (ICD 9CM code 290-319).

Treatment Admissions

Data on treatment admissions are presented below. These data represent admissions to publicly funded treatment programs for those individuals whose lack of insurance or ability to pay for services qualifies them for publicly funded care. For this reason, this data may not be representative of New Hampshire as a whole.

Figure 94 TREATMENT ADMISSIONS

Comparisons of Levels of Treatment Services 2008, 2009, 2010

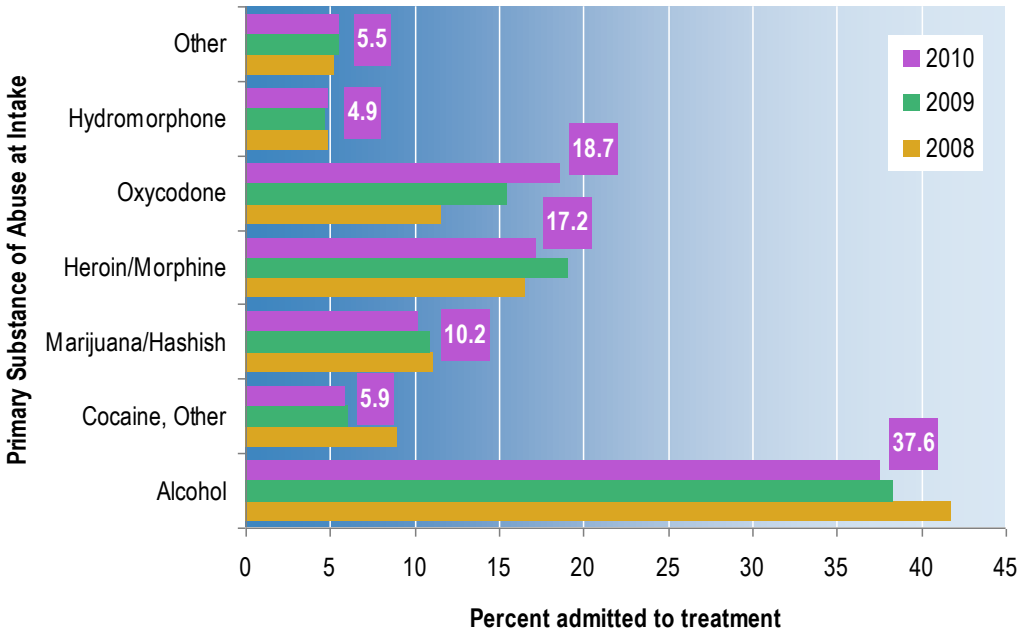


Source: NH Client Event Data Set (CEDS)

Intake data from New Hampshire Client Event Data Set (CEDS) indicates that the majority of admissions to publicly funded treatment programs are for alcohol abuse.

Figure 95 TREATMENT ADMISSIONS

NH Treatment Admissions by Primary Substance of Abuse (2008-2010)



Source: NH Client Event Data Set (CEDS)

The age at treatment intake varies by primary substance of abuse. Clients identifying marijuana as primary substance of abuse tended to be younger (median age 22) than those who identified opiates (median age 28) or alcohol (median age 38) as the primary substance of abuse. Differences among age groups are not statistically significant.

Figure 96 TREATMENT ADMISSIONS

Age of Intake of Clients in Treatment by Substance (2008-2010)

Substance Categories	N	Mean Age	Median Age	Std Deviation
All Substances	23,302	32.9	30.0	11.3
Alcohol	9,134	37.8	38.0	12.2
Cocaine, Other	1,623	33.9	33.0	9.3
Marijuana/Hashish	2,508	25.3	22.0	9.6
Heroin/Morphine	4,108	29.7	28.0	8.3
Oxycodone	3,549	29.4	27.0	8.9
Hydromorphone	1,121	31.5	29.0	9.3

Source: NH Client Event Data Set (CEDS)

Special Populations

The New Hampshire SEOW focuses on special populations including veterans, individuals in or departing correctional facilities, LGBT (lesbian, gay, bisexual or transgendered), and special insurance populations. Data are not yet available for all special populations of interest, but some information is provided below on veterans and individuals from correctional facilities.

According to the New Hampshire CEDS, in 2009, 339 veterans were admitted for substance use treatment in publicly-funded treatment facilities.

The New Hampshire Department of Corrections uses the CHOICES data system to collect information on demographics, mental illness and substance use of its population. CHOICES reports that of the 2,144 inmates in the New Hampshire State Prison system (as of April 30, 2011) 93% are men and 7% are women. During 2010, 1,158 inmates were screened for substance use disorders. Of those screened 57% reported using or abusing drugs, with 16% of that subset reporting prescription drug use. Additionally, 26% reported previous intravenous drug use.

Of those inmates who reported prior drug use, 60% reported having received substance abuse treatment.

The table below indicates the reported drugs abused by inmates:

Figure 97

Drugs abused by inmates

First Drug of Preference	Number	Percentage
Prescription Drugs	106	16%
Marijuana	232	35%
Heroin	122	18%
Cocaine	130	20%
Other drugs	75	11%

Of those inmates screened for mental health disorders (n=2559), the following data are obtained:

Figure 98

Suicide information from inmates

Suicidal	Number	Percentage
Current Suicidal	10	0.39%
Past Suicidal	549	24.5%
Suicide Attempt	421	16.5%
Family History of Suicide	401	15.7%
History of Self Injury	357	14%

Figure 99

Mental health hospitalization

Mental Health Hospitalization	Number	Percentage
MH Seen	1,651	64.5%
MH Admission	566	22.1%
Previous psychiatric meds	1,537	60%
Current psychiatric meds	640	25%

Figure 100

Drugs abused by inmates

Substance Abuse History	Number	Percentage
Substance use/abuse	1,445	56.5%
Any IV drug use	787	31.8%
Any history of SA treatment	1,707	66.7%

Mental, Emotional and Behavioral Health Indicators

The incidence of co-occurring mental and behavioral health conditions, such as depression and alcohol abuse, have long been acknowledged. However, understanding the interrelationships between the two is still an emerging field growing in its understanding of how and/or when one condition confounds or exacerbates the other.

Co-occurring disorders involve the presence of two or more mental health and substance use disorders. Understanding, diagnosing and treating co-occurring disorders has gained significant ground in research and practice but the field is still in its infancy. Just this year, the U.S. Substance Use and Mental Health Services Administration (SAMHSA) promoted the prevention of substance use and mental illness as one of its new initiatives in recognition of the importance of understanding common pre-conditions or risk factors that lead to either or both categories of disorder. A current challenge of such exploration and analysis, however, is the dearth of data sources relative to mental and emotional health disorders and their precursors.

As a result of both of SAMHSA's strategic initiative relative to preventing the co-occurrence of mental, emotional and behavioral health disorders, this data profile includes the data available in New Hampshire relative to mental and emotional health indicators.

Emotional Handicap Diagnoses

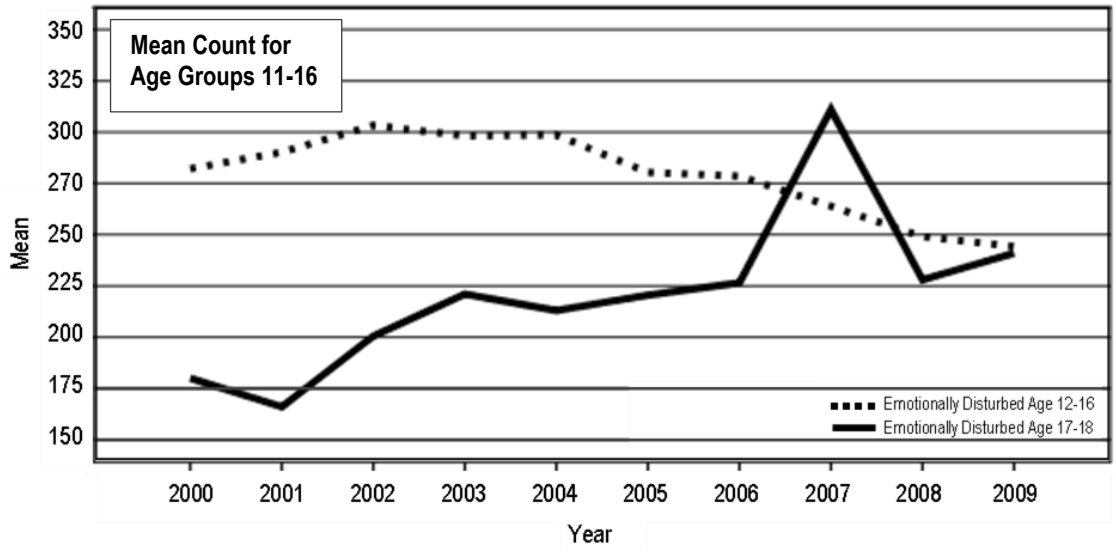
One of the few data sources available to study the emotional well-being of children is the New Hampshire Department of Education's data system for children coded as emotionally handicapped (EH) in New Hampshire's public schools. However, the number of children being coded as emotionally handicapped or emotionally disturbed may be impacted by important contextual factors.

One such contextual factor is the change in age for compulsory education. In SFY 2007-2008, New Hampshire Governor John Lynch fought successfully to pass a law requiring young people to stay in high school until age 18 to help ensure more young people receive a high school diploma. This law, in addition to the Governor's investment in alternative programs, including night school, internships and vocational education, is giving more New Hampshire youth the opportunity to graduate from high school.

In terms of schools evaluating children for emotional disorders, schools appeared to experience a 33% increase in the number of 17-18 year olds being treated for emotional disturbances. This effect did not carry over into the 2008-2009 or 2009-2010 school year. Also observed was an apparent decrease of more than 17% since 2004 of children 11-16 years old being coded emotionally disturbed. Confidence intervals were not available for this data so statistical significance cannot be determined.

Figure 101 EMOTIONAL HANDICAP DIAGNOSES

Comparisons of Levels of Treatment Services 2008, 2009, 2010



Mental Health Conditions and Substance Abuse Conditions

The New Hampshire Bureau of Behavioral Health (BBH) provides data for the annual Mental Health Community Services Block Grant and has provided this information in support of the New Hampshire SEOW Data Profile. Data sources for the following include the Uniform Reporting System, the National Research Institute, and the US Census.

ADULTS

According to the New Hampshire Mental Health Block Grant[10], of the 1,029,195 adults living in New Hampshire, approximately 55,557 or 5.4% are estimated to have a Serious Mental Illness (SMI), with 3.7% as a low estimate and 7.1% as the high estimate.

The Bureau of Behavioral Health [11] estimates that in FY2010, 37,161 adults (26% of state eligible adults) overall were served in Community Mental Health Centers (CMHC), with approximately 9,690 adults (3.6%) with SMI receiving services at CMHCs and 5,031 adults with Serious and Persistent Mental Illness (SPMI) receiving services at CMHCs.

The BBH recognizes that 73.9% of adults served in the CMHCs in FY2010 were not eligible for state funded services. They also note that the population of adults who do not meet the criteria for state-eligible services, who may not have private insurance or Medicaid, and who are low incomes has been increasing. The BBH reports that the level of uncompensated care is unsustainable for the public mental health system without additional funding, payment reform, Medicaid reform or other health insurance coverage reform.

[10] NH Mental Health Community Services Block Grant, Submitted September 1, 2010

[11] Estimates based on Probabilistic Population Estimation (PPE), Bristol Observatory. The Bureau of Behavioral Health uses PPE to estimate unduplicated counts of the number of residents likely to suffer from Serious Mental Illness. PPE corrects for the overlap in the URS table since NH's URS data table does not have an unduplicated counting system.

CHILDREN

According to the New Hampshire Mental Health Block Grant[12], of the 295,380 children living in New Hampshire, approximately 16,246 children (5.5% of the child population) have Severe Emotional Disturbance (SED). In FY 2010, over 9.000 children (9,051) with SED were served in CMHCs, representing 55% of all children in New Hampshire with SED or 3.1% of all children[13].

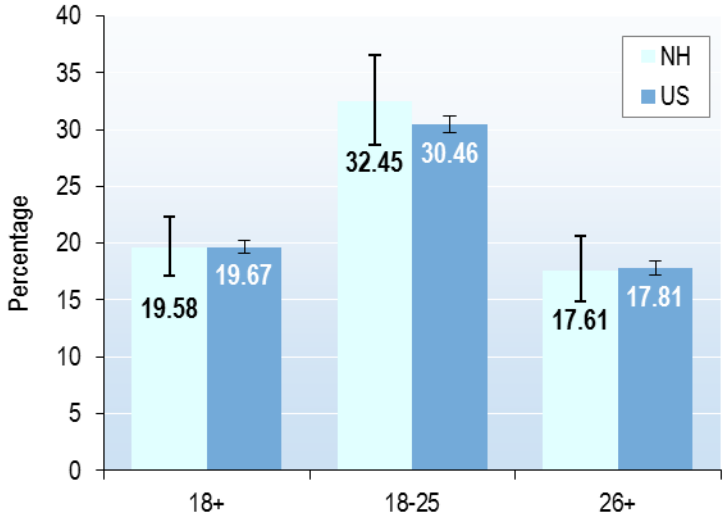
But prevalence of diagnoses and numbers served in the publicly funded mental health system is only one very limited data set.

In a recent report commissioned by the New Hampshire Department of Health and Human Services' Division of Public Health Services, the following charts and tables were produced to articulate factors that may be related to the onset and/or progression of mental health conditions. The 2011 report, "New Hampshire State Health Profile: the State of New Hampshire's Health—A Report to New Hampshire Residents" represents an important opportunity to consider other public health capacity and planning to complement substance use and mental health strategies at the state level.

On the 2008-2009 NSDUH survey, about 20% of all adults reported any mental illness in the past year. A statistically significant higher percentage of young adults aged 18 to 25 (32%) reported any mental illness in the past year as compared to adults aged 26 and over (18%) (NSDUH). This is consistent with United States averages and those for New England states.

Figure 102

Any Mental Illness in Past Year (2008-2009)



Source: National Survey on Drug Use and Health

Nationally, about 4.6% of New Hampshire adults report having a serious mental illness (SMI). SMI1 is defined as adults with a disorder, those adults whose disorder caused substantial functional impairment (i.e., substantially interfered with or limited one or more major life activities) are defined as having serious mental illness (SMI) and the most urgent need for treatment.

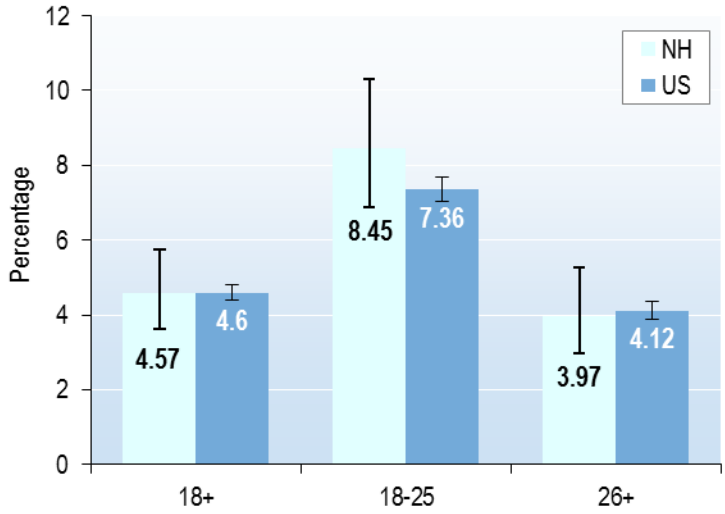
[12] NH Mental Health Community Services Block Grant, Submitted September 1, 2010

[13] Estimates based on Probabilistic Population Estimation (PPE), Bristol Observatory. The Bureau of Behavioral Health uses PPE to estimate unduplicated counts of the number of residents likely to suffer from Serious Mental Illness. PPE corrects for the overlap in the URS table since NH's URS data table does not have an unduplicated counting system.

In addition, a significantly higher number of New Hampshire young adults aged 18 to 25 report a serious mental illness (SMI) than for other age groups. This is consistent with United States and New England averages.

Figure 103

Serious Mental Illness in Past Year (2008-2009)



Source: National Survey on Drug Use and Health

Co-occurring Disorders

New Hampshire has recognized the importance of systems change to better address co-occurring disorders. Contracts in recent years have been awarded to begin to support treatment of co-occurring disorders, and the state worked vigorously with the New Hampshire Legislature and the New Hampshire Alcohol and Drug Abuse Counselors Association in the second half of the decade to support dual licensure for substance use and mental health counselors.

According to the New Hampshire BBH, the 2009 New Hampshire Medicaid population was 120,700. Of that total, 34% (40,980) have a diagnosable mental illness while another 4.1% (4,931) have both a mental illness and secondary substance use disorder.

On the following page are the number and percentages of individuals on Medicaid who have a major disorder, by disorder category, and the number and percentage of individuals who have both the mental health disorder listed in addition to a secondary substance use disorder.

Figure 104

2009 Medicaid Population

Major Disorder	Number of members with the disorder	% of all Members	Members with secondary Substance Abuse Disorder	% of all Members
Schizophrenic Disorders	2,871	2.4%	372	0.3%
Major Depression	6,292	5.2%	1,397	1.2%
Bipolar & Other Affective Psychoses	6,793	5.6%	1,513	1.3%
Other Psychoses	7,619	6.3%	771	0.6%
Stress & Adjustment	10,955	9.1%	1,484	1.2%
Personality Disorder	1,793	1.5%	637	0.5%
Disturbance Of Conduct	2,931	2.4%	275	0.2%
Disturbance Of Emotions	2,109	1.7%	140	0.1%
ADHD Hyperkinetic	8,134	6.7%	587	0.5%
Neurotic Disorder	15,431	12.8%	2,974	2.5%
Depression Nec	12,723	10.5%	2,431	2.0%
Other Mental Disorders	3,084	2.6%	455	0.4%

Depression categories such as Major Depression, Bipolar & Other Affective Psychoses and Depression Nec, when combined, comprise the greatest percentage (41%) of Medicaid recipients with secondary substance abuse disorders.

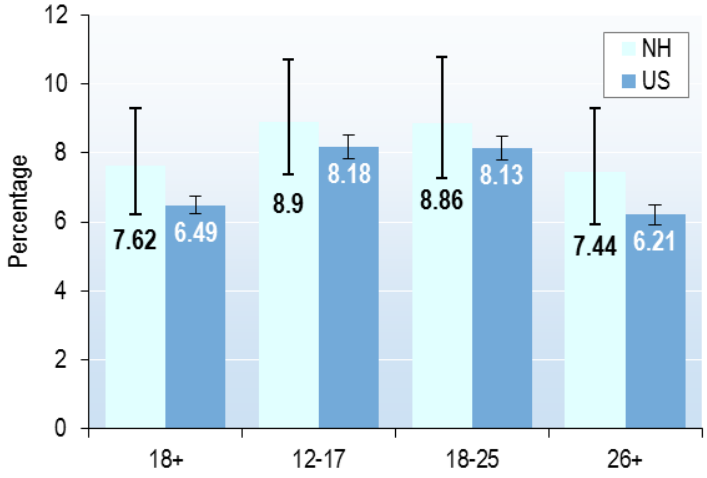
Depression

Nearly 8% of New Hampshire residents aged 12 and over reporting at least one major depressive episode in the past year (NSDUH 2008-2009).

There are no statistically significant differences amongst the age groups or from United States averages.

Figure 105

Had at Least One Major Depressive Episode in Past Year (2008-2009)

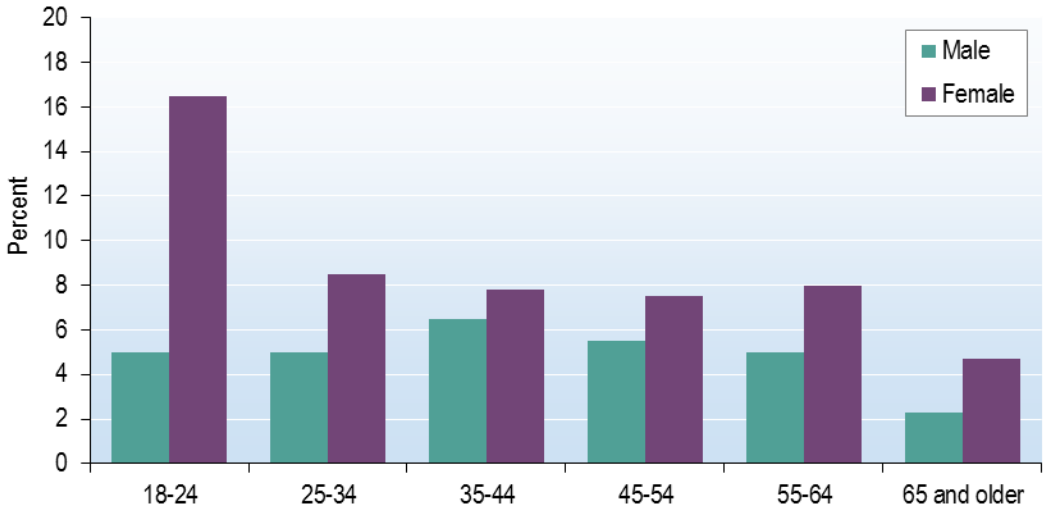


Source: National Survey on Drug Use and Health

In a New Hampshire BRFSS survey from 2006, there was a statistically significantly higher percentage of women reporting current depression (female- 8.7%, male-4.8%), and anxiety disorders (female- 17.9%, male-7.3%)14 than for men in New Hampshire. Comparison data to United States averages were not available. By age group, women aged 18 to 24 had the highest reported current depression in 2006.

Figure 106 **MENTAL HEALTH – DEPRESSION - ADULTS**

Current Depression by Age Group and Gender (2006)



Source: NH BRFSS

[14] *New Hampshire Behavioral Health Risk Factor Surveillance System*

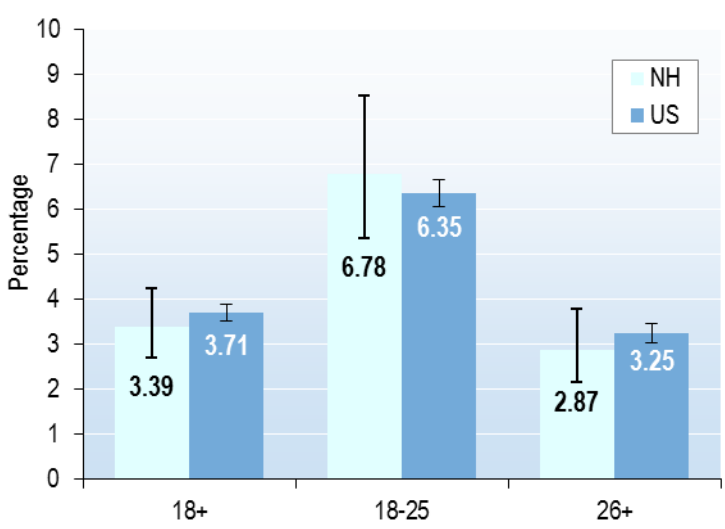
Depression and Anxiety Disorder Among NH Adults, 2006 -- Issue Brief Accessed at http://www.dhhs.state.nh.us/dphs/hsdm/brfss/documents/depression.pdf on 12/08/2011.

Suicide

The most devastating outcome of mental health disorders is suicide. Not reflected in the graphs below are a recent pattern of several suicides in the past six months that have occurred within 48 hours of an individual having been arrested for Driving While under the Influence (DWI). A newly formed commission on suicide brings together state agencies and the National Alliance on Mental Illness-NH (NAMI-NH), also a member of the New Hampshire SEOW.

Data from NSDUH in 2008-2009 show that young adults aged 18 to 25 reported having serious thoughts of suicide in the past year statistically significantly more than adults aged 26 and over. This is consistent with United States and New England state averages.

Figure 107

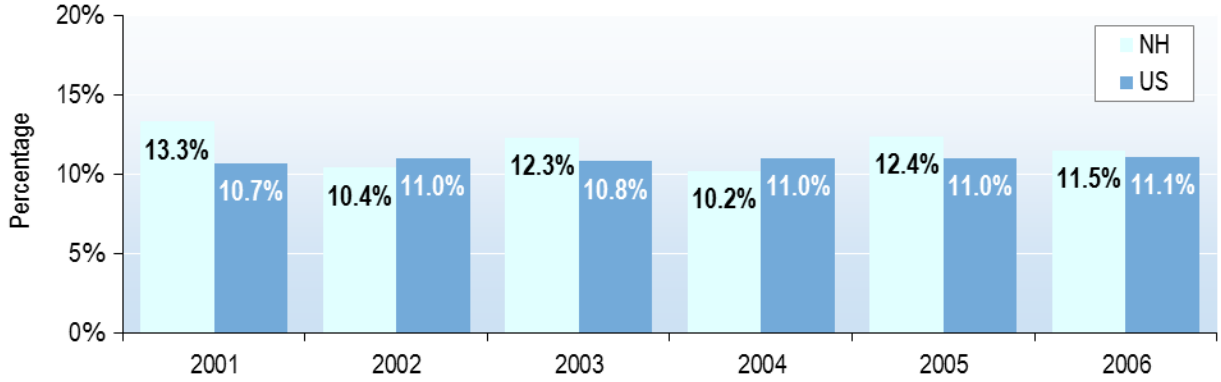


Source: National Survey on Drug Use and Health

For the purposes of this data profile, suicide statistics from the National Center for Health Statistics and the New Hampshire Vital Records Administration are presented.

Figure 108 **SUICIDE**

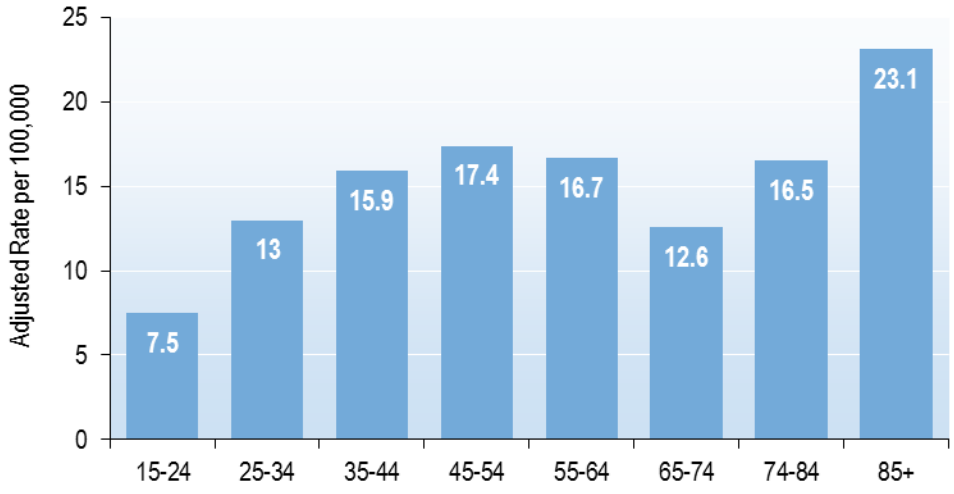
Rate of Suicides per 100,000 Population (2001-2006)



Source: Death certificate data: National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS), Mortality Detail files, 2001–2006.

Chart 109

Suicide Deaths by Any Cause/Mechanism (2007)



Age	Adjusted Rate
Per 100,000	
0-4	*
5-14	*
15-24	7.5
25-34	13
35-44	15.9
45-54	17.4
55-64	16.7
65-74	12.6
75-84	16.5
85+	23.1
Overall	11.2

Data Source: NH Division of Vital Records Administration death certificate data.

Indicator Definition: Resident deaths with underlying cause of death in Intentional Self-Harm (suicide) group (ICD 10 code U03, X60-X84, Y87.0).

Mental Health by Insurance Source

According to a study of mental health and substance abuse care[15] in the commercial insurance market in New Hampshire using the 2007 Healthcare Effectiveness Data and Information Set[16], approximately 1 out of 4 people aged 18 and older in the United States suffer from a diagnosed mental health disorder in a given year.[17] About 8.3% of persons the United States population, aged 12 years and older, were diagnosed with a substance use disorder.[18] Research has also established that mental health disorders and substance abuse disorders are co-morbid health conditions.[19] For example, substance abuse is more prevalent (24.3%) among people who have had a major depression episode (MDE) compared to 8.1% of people without a MDE.[20]

The 2007 Healthcare Effectiveness Data and Information Set® (HEDIS) provides information on New Hampshire's statewide service of health care needs of the patients with mental health and substance abuse disorders. Under New Hampshire law (RSA 420-G:11. II-a), all New Hampshire

[15] Data reported in this section apply only to privately insured patients in NH during 2007. A more comprehensive picture of NH would also include data on the Medicaid and uninsured populations.

[16] New Hampshire Health Plan Performance Summary Report, 2007. NH DHHS, 2008.

[17] The Numbers Count: Mental Disorders in America. National Institute of Mental Health. http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america.shtml

[18] National Survey for Drug Use and Health, 2008.

[19] Nunes, Selzer, Levounis, and Davis (2010). Substance Dependence and Co-occurring Psychiatric Disorders. Civic Research Institute, Kingston, NH.

[20] 2006 National Survey on Drug Use and Health: National Findings. United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6Results.pdf

carriers who collect HEDIS data must annually submit the HEDIS information to the state. The data supplied by Anthem represents 162,364 members, CIGNA data represents 104,472 members, and Harvard Pilgrim data represents 65,507 members. Data are presented that show statewide aggregations of HEDIS measures of health care provided in 2005-2006. Comparisons are provided for national data and two regions: New England region (ME, NH, VT, CT, MA, RI) and Vermont and Maine combined. Indicators are as follows:

- Mental health utilization
- Follow-up after hospitalization
- Antidepressant medication management
- Chemical dependency utilization.

Many mental health disorders can be managed effectively through outpatient care, including prescription drug management by a primary care provider and counseling with a trained professional. People with serious mental health disorders, especially those who attempt suicide, typically receive treatment in a hospital inpatient setting. Inpatient settings may include acute treatment at a general medical hospital or longer-term treatment at a mental health hospital.

- In New Hampshire, the average length of stay for inpatient mental health services was 6.6 days, similar to the national average, of 6.1 days but shorter than the regional benchmarks by an average of 1 day.
- The average mental health length of stay in the state has remained unchanged since 2005.

Appropriate follow-up care after hospitalization can reduce the rate of re-hospitalization and ensure patients are accessing needed services.

- Nearly 75% of patients hospitalized in New Hampshire for a mental health condition had an ambulatory follow-up within 7 days of discharge, and 91% within 30 days. These rates significantly exceeded the national and regional averages.
- The percentage of NH residents receiving follow-up care 7 days following hospitalization for a mental illness has increased by 5%, and increased by 2% for follow-up within 30 days.

Appropriate medication management is an important strategy in helping to treat a person's depression, and in many cases can improve a patient's overall well being.

- 25% of New Hampshire patients newly diagnosed with depression and treated with an antidepressant medication had at least 3 visits with a provider within the initial 84 days of treatment. This rate is significantly above the national and Vermont and Maine averages, but below the New England rate.
- Approximately two-thirds of New Hampshire patients newly diagnosed with depression remained on an antidepressant medication for at least 84 days, and a little over half remained on the medication for at least 180 days. Compared to the national and regional benchmarks, New Hampshire's rates for acute and continuous phase treatment were more favorable.

- The rate of optimal practitioner contacts in the state remained level since 2005. Acute and continuation phase treatment rates declined slightly.

Like mental health conditions, some with serious substance abuse or chemical dependency disorders receive treatment through a hospital inpatient setting. Inpatient settings may be a hospital or another facility providing inpatient dependency treatment.

- In New Hampshire, the average length of stay for inpatient substance abuse services is similar to the national and regional averages.
- Since 2005, the average length of stay for chemical dependency increased by ½ day.

Data Limitations and Gaps

Every analysis has missing components and every data set has its limitations. It is important that such weaknesses, gaps, and limitations are at least acknowledged if not specified. What follows is a general overview of those factors.

An important limitation or gap is that not all populations are represented. In New Hampshire, for example, Asians, African Americans, and Hispanics make up about only 5% of the population combined, and those populations tend to be concentrated in certain geographical areas. Since these populations are small, sample sizes prohibit appropriate analyses. For similar reasons, other populations not studied or understudied include lesbian/gay/bisexual/transgendered (LGBT), veterans, incarcerated, and in some cases, underinsured or uninsured.

The urban, suburban, rural composition of New Hampshire is also not well specified in the data. The population of New Hampshire of just over 1.3 million is concentrated in the lower third of the state and population centers located through major transportation corridors. Also, the very small population of Asians, African Americans, and Hispanics are often geographically segregated in two or three areas in the state.

The New Hampshire population is distributed in economically diverse enclaves that have historically unique economic distributions. In the data represented in this profile, social and economic systems are not tracked along historical or economic boundaries.

Further limitations may include:

- Age groups are represented equally or in the same way in the data
- Time periods for data collection are uneven or inconsistent
- Measurements are taken on instruments with varying degrees of reliability and validity
- Differences exist in event-oriented data versus self-report oriented data
- Some data are from samples that may or may not be representative or random and some not from samples at all, such as vital records
- Many data sets are incomplete or have only partial recording
- Many different scales and measurement degrees are utilized, including nominal, ordinal, and interval levels of measurement

In some sense, a profile is art, a mosaic fitted with a variety of pieces inserted to create a pattern. Every pattern can be assembled uniquely depending on the pieces and the perspective of the artist. The question of concern is the meaning derived from the pattern as presented in the profile. By acknowledging the limitations and gaps inherent in the pieces as well as the assembling the pattern as a whole, the information conveyed in the profile can be judged in a context similar to that in which it was created in the first place.

Conclusion

The findings of this profile suggest a significant need for substance use and mental health prevention and treatment service upgrades. Compared to the nation, a statistically significantly higher proportion of New Hampshire residents in all age groups report using alcohol and marijuana in the past 30 days. According to the 2008-2009 National Survey on Drug Use and Health (NSDUH), a higher proportion of New Hampshire youth aged 12-17 and young adults aged 18-25 reported binge drinking that their peers nationally. New Hampshire residents of all age groups report lower perceptions of risk of harm from alcohol use and marijuana use. The most pronounced differences from the nation on all of these indicators appear among NH's young adult population.

New Hampshire young adults aged 18-25 also report statistically significantly higher rates of illicit drug use other than marijuana and non-medical use of painkillers that their peers nationally. Prescription and over-the-counter drug misuse is also evident in subpopulations such as the incarcerated. The number of drug related deaths in New Hampshire has increased ten of the last fifteen years, with the number of drug related deaths more than tripling since 2000; the number of deaths involving overdoses of prescribed drugs has almost doubled between 2008 and 2009.

Research has also established that mental health disorders and substance abuse disorders are co-morbid health conditions. For example, substance abuse is three times as prevalent among people who have had a major depression episode compared to 8.1% of people who have not. New Hampshire must continue to improve systems to address these co-occurring disorders.

This data profile represents the first step in understanding the scope and severity of substance abuse and mental health disorders in New Hampshire populations. It will be used and interpreted by state and community representatives to determine priorities for prevention, intervention and treatment activities.

Acknowledgments

The vision of the staff of the New Hampshire Bureau of Drug and Alcohol Services has been the driving force behind the important mission of developing data-driven priorities, outcome measures and monitoring systems for New Hampshire populations. It has been their leadership and design that has led to the resources and action involved in the production of this data profile and to the support that is accessible to communities seeking to improve outcomes for their citizens. Notable investors and partners of the Bureau include the Governor's Commission on Alcohol and Drug Abuse Prevention, Intervention and Treatment and the New Hampshire Charitable Foundation and their substance use portfolio.

The New Hampshire Center for Excellence for Alcohol and Drug A, housed at the Community Health Institute/JSI Research & Training Institute, was tasked with leading the profile's development and engaged many data stewards and key experts. Gratitude is extended to the many contributors: the New Hampshire Department of Safety, the New Hampshire Department of Education, the New Hampshire Division of Public Health Services, the New Hampshire Department of Corrections, the New Hampshire Bureau of Behavioral Health, the Northeast Center for Applied Prevention Technology, Synectics, the Pacific Institute on Research and Evaluation (PIRE), the University of New Hampshire, the New Hampshire Center for Excellence Expert Panel, the Executive Officers and Task Forces of the Governor's Commission, and many others. Much of the time and expertise that has been contributed has been because of not only professional but personal commitment to the well-being of New Hampshire residents and communities.

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